Blackwood Basin
Securing the Future

BLACKWOOD
CATCHMENT
CO-ORDINATING GROUP

Community action on sustainable resource management

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Conservation and Land Management

Agriculture WESTERN AUSTRALIA

WATER AND RIVERS COMMISSION

Department of Environmental Protection

Natural Heritage Trust Package 1998
The Blackwood Basin
Western Australia

Contents

THE BLACKWOOD BASIN – SECURING THE FUTURE

A message from Blackwood Catchment Coordinating Group Chairman - David Reid

Western Australian farmers are national leaders in landcare and many of our country's sustainable farming pioneers live and work in the Blackwood River Basin. Their motivation, self-reliance and the scale of their personal investment and contribution to landcare have been a source of inspiration to all Australians working towards more sustainable natural resource management.

A shared vision has driven our catchment community into cooperative action. This vision is one of a viable future for current and future generations in the Blackwood River Basin, drawing on strengths flowing from cleaner water, more fertile and productive soils, an improved balance of vegetation and a rich diversity of native flora and fauna protected in valuable sweeps of remnant vegetation.

We have developed our proposal – The Blackwood Basin Securing the Future – as a committed step towards achieving this vision by building on the effort already invested in landcare, capturing the innovation and commitment of individuals and combining it with the latest knowledge and experience gained from the first stage of the Blackwood Catchment Coordinating Group's Regional Initiative.

A sound investment was made in the first stage of our Regional Initiative to deliver practical on-ground results and to collect reliable biophysical data which we have processed with the latest spatial data mapping techniques to build an accurate picture of the scale of the land management challenges facing the Blackwood Basin.

The new biophysical data has provided an instrument for the Group to develop an innovative Zone Management System approach to planning and responsibility for the next stage of the Regional Initiative. This has allowed us to plan future investment in on-ground works with greater certainty that resources will be used strategically and efficiently to achieve natural resource targets set by the community.

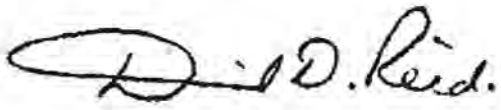
While the Blackwood community cannot afford to wait for the moment of absolute certainty of catchment management, the Zone Management System offers a more defined planning tool in the fight against land degradation by combining scientific data and strong community resolve to translate knowledge and energy into coordinated on-ground action.

The Blackwood Catchment Coordinating Group is the community driven and managed body that accepts the responsibility and accountability for public and private investment in landcare within the basin.

Our new planning and implementation framework will improve our capacity to deliver federal, state and local funds on the ground in a coordinated way, and maintain it in the future. Our catchment community will be re-energised and empowered by the new levels of responsibility for managing natural resource issues and outcomes at a local level, and the shared vision of building a succession plan for future generations to inherit a healthy and productive natural resource.

Most importantly the central theme of our proposal reflects the Blackwood Catchment Coordinating Group's philosophy of community ownership and managerial responsibility for the catchment.

I convey to you the enthusiasm and energy of our catchment community in presenting The Blackwood Basin Securing the Future 1998 Natural Heritage Trust proposal for your consideration.



Executive Summary

The Blackwood Catchment Coordinating Group's Securing the Future proposal boldly embarks on a new approach to Integrated Catchment Management that will achieve environmental change across the Blackwood Basin's 2.2 million hectares.

The proposed $5.7million three year Natural Heritage Trust investment in the Blackwood Basin will generate an addtional $10 million in community, government and corporate spending. This incentive will motivate our community to expedite critically important on-ground environmental reparation and strengthen partnerships between industry, community and government.

It is widely recognised by our catchment community that environmental changes are needed to sustain the natural resources of the basin as our social and economic well-being is inextricably linked to the health of the natural environment.

This Securing the Future proposal is built on a comprehensive set of catchment-wide targets (see Section 3) that identify specific outcomes over three, ten and thirty years. These community-driven targets provide direction for prioritising activities within the basin and give explicit guidance for zone, catchment and property planning and implementation.

Central to the success of this second phase of the Blackwood Catchment Coordinating Group's Regional Initiative are the sound planning and implementation methods which build on the experience gained over the past three years of the Initiative. The BCCG has worked with natural resource management agencies to develop a planning and implementation framework – the Zone Management System - that delineates key responsibilities at site, property, catchment, zone and basin levels.

Clearly defined responsibilities at each level of the new Zone Management System encourage involvement at all levels of natural resource management; from the farm paddock dealing with an individual issue such as soil erosion, to the larger basin scale where issues such as protecting and linking regionally significant vegetation are important.

In Securing the Future the BCCG presents a Natural Heritage Trust package consisting of a range of on-ground implementation projects that deliver guaranteed outcomes which are supported by a core of essential communication, coordination, extension and monitoring services to maximise the effectiveness and efficiency of the investment.

The implementation program consists of four integrated elements to direct funds to priority on-ground activities that will achieve specified basin-wide targets.

The largest program involves planning and implementation at the zone level. Nine zones have been identified in the Blackwood Basin from earlier work to determine similarities in surface hydrology, vegetation systems, soil capabilities and topography. Each zone has an exit water monitoring point.

The three year Zone Action Plan Implementation program will engage communities within each of five priority zones to develop Zone Action Plans based on benefit-cost analyses to determine investment for public and private good and to meet zone targets.

By determining their own local priorities, with assistance from the BCCG, communities will be empowered to implement action plans. Each of the five zones will be allocated $150,000 per year over a three year period to develop and implement Zone Action Plans. A key link to the development of these zones is the extension of findings from the State Salinity Action Plan focus catchment, recovery catchment and rescue town initiatives.

The other three implementation elements will be administered at the Basin level and involve Strategic Implementation for Remnant Vegetation Management, a Community Start-up Incentive Scheme to provide incentives for small to medium-sized projects that encourage groups to develop by creating activity at a local level to meet basin targets, and Protecting High Value Public Assets to identifiy and protect natural features of significance for their social, economic and environmental values.

The Program Support part of the Securing the Future proposal will ensure the expedient use of funds at all levels defined within the planning and implementation framework.

Central to the smooth operation of the program is the network of zone-based coordinators who will motivate, resource expertise and provide essential guidance to catchment groups, zone working groups and the BCCG. The Basin and Implementation Coordinators, directed by the BCCG, will provide strategic guidance to all levels to facilitate the delivery, monitoring and evaluation of funds, and coordinate information within and outside of the Basin.

Responsibility for ensuring funds are appropriately invested in the Blackwood Basin and coordinating the management of the Securing the Future package lies with the BCCG. This Group consists of community members, local government, industry and state agencies. It has successfully managed the first phase of the Blackwood Regional Initiative and has a proven financial and environmental track record.

The responsibility for undertaking tasks at the six levels of planning and implementation in the Blackwood Basin is identified in Section 5. The responsibility for meeting the objectives and outcomes of the individual projects lies with the stakeholders identified in each proposal.

The BCCG will seek State Cabinet endorsement of the Securing the Future proposal to ensure it is consistent with State Government policy and the intent of the Natural Heritage Trust Partnership Agreement between the Commonwealth and Western Australian Governments.

The BCCG will accept overall responsibility for meeting the requirements of the Natural Heritage Trust including delivery of defined on-ground outcomes, performance and financial reporting.

The community and natural resource agencies have worked cooperatively in the past three years to progress natural resource management and institutional reform and we are now well placed to deliver on Securing the Future to translate resources into action.

Project Summary

The major projects of the Blackwood Catchment Coordinating Group's 1998 Natural Heritage Trust proposal *Securing the Future* are:

	NHT Funds Sought
1. Zone Action Plan Implementation Achieve on-ground priority action to meet zone and basin targets within five zones.	**$1,372,230**
2. Strategic Implementation for Remnant Vegetation Management Protect and manage strategic areas of high conservation value remnant vegetation.	**$900,000**
3. Community Start-Up Incentive Scheme Encourage and facilitate the formation and ongoing development of catchment groups by funding small to medium-sized projects which will be catalysts for groups and meet Basin targets.	**$472,230**
4. Protecting High Value Public Assets Protection of regionally significant public assets (social, economic and environmental) that are at risk from land and water degradation.	**$310,980**
5. Dongolocking Revegetation Project Development of a biodiversity decision support system and implementation of on-ground remnant vegetation protection to integrate productive, sustainable land use with biodiversity.	**$300,000**
6. Basin Coordination Coordination of basin activities including communication, environmental education, implementation and strategic development for integrated catchment management.	**$809,404**
7. Zone Coordination Support and act as a catalyst for zone and catchment group activity by providing technical resources and facilitating public participation to achieve zone and basin targets.	**$1,013,759**
8. Information Management Equip communities and landcare practitioners with information management and decision support tools to ensure effective planning and adoption of best management practices.	**$286,850**
9. Monitoring and Evaluation A systematic approach to monitor and evaluate strategic performance, project outcomes, environmental change, financial management and catchment activity to assess progress towards sustainability.	**$312,662**
TOTAL	**$5,778,115**

Note: Full project details and budget projections are described in Section 7.

Budget Summary

An overview of the total budgets covered by the Blackwood Catchment Coordinating Group's Natural Heritage Trust 1998/99 Application follows, detailed budgets are outlined in Section 7.

Blackwood Basin – Securing the Future

(Blackwood Regional Initiative Phase II)

Natural Heritage Trust 1998/99

Summary of All Projects

Year	Total Costs
1998/1999	$3,949,911
1999/2000	$5,389,646
2000/2001	$7,176,856
Total	**$16,516,413**

State Funds	Community	Other	NHT Funds	Totals
$405,190	$2,116,299	$41,000	$1,387,422	$3,949,911
$598,277	$2,745,663	$31,000	$2,014,706	$5,389,646
$1,224,906	$3,544,963	$31,000	$2,375,987	$7,176,856
$2,228,373	**$8,406,925**	**$103,000**	**$5,778,115**	**$16,516,413**
13%	51%	1%	35%	100%

1998/1999

Projects	Total Costs
Implementation	$2,546,980
Program Support	$1,402,931
Totals	$3,949,911

State Funds	Community	Other	NHT Funds	Totals
$21,000	$1,727,500	$30,000	$768,480	$2,546,980
$384,190	$388,799	$11,000	$618,942	$1,402,931
$405,190	$2,116,299	$41,000	$1,387,422	$3,949,911

1999/2000

Projects	Total Costs
Implementation	$3,577,980
Program Support	$1,811,666
Totals	$5,389,646

State Funds	Community	Other	NHT Funds	Totals
$10,000	$2,374,500	$25,000	$1,168,480	$3,577,980
$588,277	$371,163	$6,000	$846,226	$1,811,666
$598,277	$2,745,663	$31,000	$2,014,706	$5,389,646

2000/2001

Projects	Total Costs
Implementation	$4,612,980
Program Support	$2,563,876
Totals	$7,176,856

State Funds	Community	Other	NHT Funds	Totals
$10,000	$3,159,500	$25,000	$1,418,480	$4,612,980
$1,214,906	$385,463	$6,000	$957,507	$2,563,876
$1,224,906	$3,544,963	$31,000	$2,375,987	$7,176,856

1 Introduction

The Blackwood Catchment Coordinating Group has developed a new planning and implementation framework to accelerate sustainable resource management in the Blackwood River Basin. The new Zone Management System will:

1. **Involve more people** in landcare,
2. **Stimulate public and private investment,**
3. **Attract external funding** for on-ground works to community catchment groups,
4. **Encourage strategic and integrated projects** between the community and government agencies, such as the State Salinity Action Plan.

The Blackwood Catchment Coordinating Group (BCCG) is now entering the second stage of the Regional Initiative which commenced in 1995. The new Zone Management System provides a rigorous planning and management framework that builds on the knowledge gained from on-ground activity in the Blackwood Basin. It also addresses current barriers to natural resource management and helps stakeholders define their objectives to initiate more specific and strategic programs.

A number of strategies and supporting programs have been developed by working within this new framework including:

Strategic On-ground Delivery Programs:	**Program Support:**
Zone Action Plan Implementation	Basin Coordination
Strategic Implementation for Remnant Vegetation Management	Zone Coordination
Community Start-Up Incentive Scheme	Information Management
Protecting High Value Public Assets	Monitoring and Evaluation
Dongolocking Revegetation Project	

This proposal seeks funding to support these strategies and programs. Sections 1 to 3 of the proposal explain the context for developing the proposal and include general background on the Blackwood Basin, its management by the BCCG, the achievements of the Group and the basin targets. It identifies barriers to implementing landcare activities and describes the evolution of the new planning and management framework. Sections 4 to 7 outline the individual strategies for on-ground implementation with detailed project submissions and budgets and the programs to support these strategies.

2 The Blackwood River Basin

2.1 Catchment Profile

The Blackwood catchment is the largest river basin in Australia's south west covering 22,000 square kilometres. It spans 350 kilometres from Dumbleyung in the east to the Hardy Inlet at Augusta on the south west coast (Figure 1). The Blackwood River carries the greatest flow of the south west rivers and it draws on a number of inland tributaries including the Arthur and Beaufort Rivers.

The basin supports a range of population centres and industries which place pressure on the natural resources. Of the 35,000 people living in the Blackwood Basin, about 80 per cent live in major regional centres. The lower catchment is experiencing a development and population boom at one of the fastest rates in Australia with significant change in the types of rural industries including forestry and intensive horticultural enterprises, and cultural diversification.

Agriculture is the main land use with the major industries being sheepmeat, wool, beef, grain, dairy, horticulture and viticulture. Within the basin there are 2000 farming businesses which contribute in excess of $400 million per annum to the national economy. Other important industries include tourism, forestry and mining which account for an additional $150 million per annum.

The industries operating within the Blackwood Basin have exacted a toll on the native flora and fauna, with over 70% of the total catchment cleared. Of the remaining vegetation approximately 30% occurs on private land. In the lower basin large areas of native vegetation occur in reserves. In the upper basin, where land had been extensively cleared, remnant vegetation is found in scattered pockets and only accounts for 3% of the land area.

The major land and water resource challenges within the catchment include dryland salinity, degradation of potable water supplies and loss of biodiversity. In the past 150 years over 650 square kilometres of land has been severely degraded by rising water tables and salinity, and the area affected is expected to treble by the year 2030. Over 80% of the stream systems and wetlands are severely degraded, with salinity concentrations in many reaches of the river expected to treble in the next decade.

2.2 Blackwood Catchment Coordinating Group Profile

The people of the Blackwood Basin have a long involvement in landcare activities. A growing understanding of the impacts of land degradation on farm productivity, nature conservation and public assets led to the formation of 17 Land Conservation District Committees, 150 catchment groups and a number of active conservation and special interest groups. Of the total number of catchment groups operating in Western Australia 25% are in the Blackwood Basin.

Work began in 1990 to identify how communication and coordination of activities between the various groups could be improved. In 1992 the Blackwood Catchment Coordinating Group (BCCG) was formed as a peak body for the existing groups. The BCCG includes representatives of geographic areas through Shire and Land Conservation District Committee representatives from the lower, middle and upper catchment regions, while sectional interest representation is from conservation, farmer, community and industry groups and the Hardy Inlet Management Advisory Committee. There are also a number of non-voting representatives from government agencies.

The Blackwood Basin Community Partnerships diagram (Figure 2) explains the relationships between the groups active in the basin and the community driven management role of the BCCG.

2.3 Progress of the BCCG Regional Initiative

A number of strategies have been developed since the BCCG's inception to address issues including The Blackwood Land Conservation Strategy 1995; Strategic Directions for Land Conservation 1997; the Draft Environmental Education Strategy 1997; and the Blackwood Catchment Regional Initiative 1995.

The Blackwood Land Conservation Strategy 1995 and its summary document Strategic Directions for Land Conservation in the Blackwood Catchment 1997 identified needs and recommendations of natural resource managers in the upper, middle and lower parts of the Blackwood Basin.

The Regional Initiative incorporated a package of technical, strategic and on-ground projects and the outcomes to date are presented in Figure 3 Achievements of the Blackwood Catchment Coordinating Group.

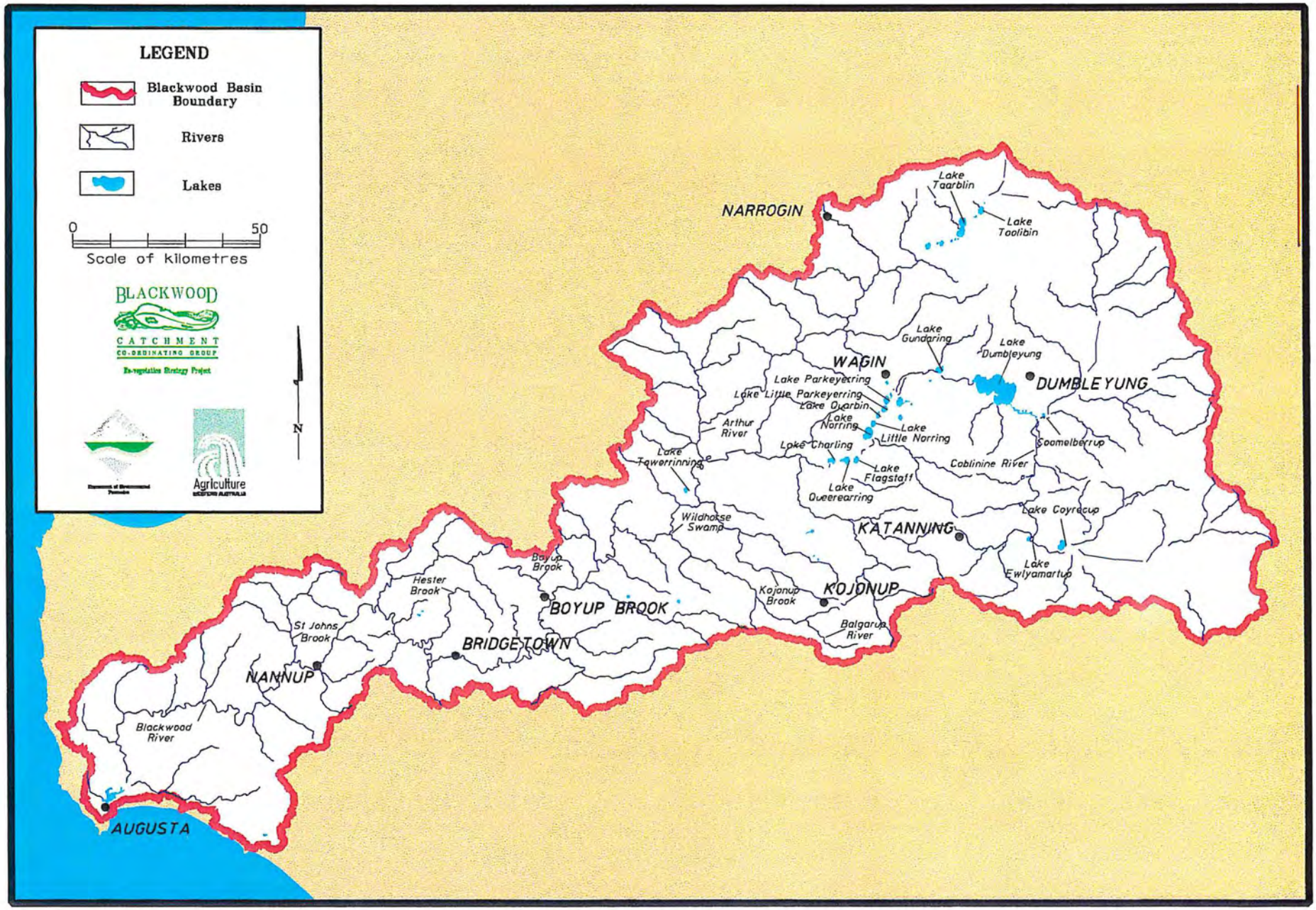


Figure 1 :Rivers and Wetlands of the Blackwood River Basin.

Blackwood Basin Community Partnerships

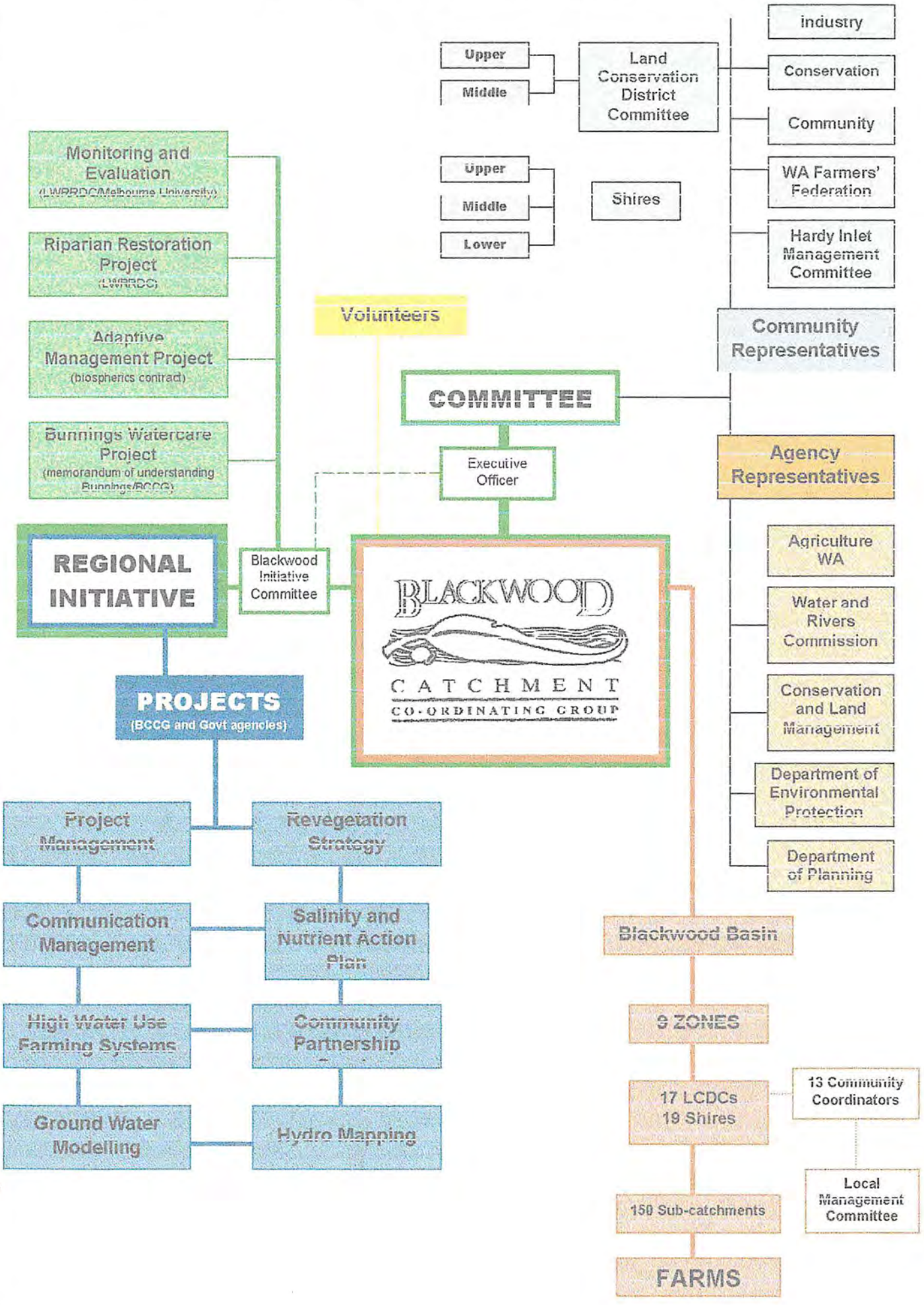


Figure 3: Achievements of the Blackwood Catchment Co-ordinating Group

1 Community Partnerships — $609 000

- $609,000 funding has stimulated over $2 million of on-ground investment in landcare activities by the community.
- 143 of the 336 applicants received funding over the three year period.
- Major activities funded by the grants include: implementation of high water use farming, demonstrations of tree lined banks on a sub-catchment scale, revegetation of lower ground water tables, surface water control to reduce water logging and fencing to encourage revegetation of remnant vegetation.

2 Salinity and Nutrient Action Plan — $488 500

- Complete compilation of all surface water quality data and atlas created to help predict trends of streamflow salinity nutrients.
- Hydrogeological advice given to farmers and catchment groups, providing reasons and solutions for salinity.
- Database of all bore data created (AGWA, CALM, WRC) has increased understanding of groundwater tables and aided the prediction of saline areas.

3 Revegetation Strategy — $321 700

- GIS for Blackwood fully functional, this tool is aiding in the development of revegetation strategies.
- Planning scales developed for the Blackwood (DEP, AGWA, CALM).

4 Ground Water Modelling for Groups — $260 000

- 3 subcatchments modelled for landuse impacts on ground water hydrology (AGWA, CALM). Aiding the prediction of salinity and identifying ways to combat rising water tables.

5 High Water Use Farming Systems — $258 000

- 3 farms with different agricultural systems monitored for high water using potential
- 3 additional farms monitored for different landuse practices (AGWA)
- Thus providing data on the relationship between water use and profitability.

6 Hydrogeological Mapping — $200 000

- 1:250,000 map of hydrogeology for whole Blackwood Catchment (WRC, AGWA) which has provided the an understanding of ground water processes for the whole Blackwood Basin

7 Integrated Catchment Modelling — $136 000

- Model being built for the upper catchment on social, economic and biophysical indicators – ongoing
- 2 day workshop with 100 people was held in the Blackwood in 1996
- Series of 9 half day workshops in 1997 (Dept of Housing & Regional Development, LWRRDC, Melbourne University, community)

8 Riparian Management Program — $50 000

- Middle catchment survey revealed attitudinal change has occurred with an increasing awareness of problems. (LWRRDC, CSIRO, community)
- 6 demonstration sites providing data on different methods of managing riparian zones (LWRRDC, AGWA, community)
- 3 demonstration sites providing data on different methods of restoring saline riparian sites (LWRRDC, community)
- 4 workshops on riparian management with 80 people involved.
- School scholarships and book prizes – 1995-1998 (community, MPs)

9 Communications — $214 000

- Communications strategy developed – 1998
- Environmental Education Strategy developed - 1998 (CALM)
- "Blackwood – Seven Years On" Conference - 1997 (AGWA, SWDC)
- Seminars on the State of the Blackwood - 1997 (AGWA, WRC)
- Wide media coverage including Cross Country – 1997
- Five editions of the "Blackwood News" – distribution of 14,000 people (Local Govt, LCDC, MPs)
- Four papers on the Blackwood Catchment – 1996, 1997
- Entry signs to the catchment established on 11 busiest roads –1995 (Main Roads Dept)

10 Project Management — $357 000

- Evaluation of the Regional Initiative – 1998 (CSIRO)
- Planning, monitoring and reporting system developed (AGWA)

2.4 Strategic Reviews

At its inception the BCCG recognised catchment management would be a developing process as the Group gained practical knowledge from on-ground activities and state and federal political climates changed.

To evaluate the BCCG's performance and strategic direction committees have been set up to review progress on strategic and technical projects; discussions are held with government and industry; and open community forums are conducted to gain input. Important challenges have been identified by farmers who find it difficult to understand the relevance of the BCCG to the landcare activities on their own properties. This and any perception that the organisation produces vague mission statements will be resolved by an implementation process linked to the current strategic plan.

2.5 Targets

The BCCG has developed targets to address issues including ground and surface water management, preservation and restoration of biodiversity, riparian management, water quality, environmental weeds, and group development, coordination and communication. Targets have been set for the key biophysical, social and economic parameters building on the priorities identified in discussions and reviews, and information from research projects. The targets for the Blackwood Basin are packaged into short term (3 years), medium term (10 years) and long term (30 years) targets setting out the progress needed to achieve natural resource sustainability.

1. GROUND WATER MANAGEMENT TARGETS

Objective: *Reduce recharge to deep ground water systems by 50% to reduce salinisation rate.*

Short term:
- 70% of farmers aware of water balance targets and hydrology
- 15% of private land vegetated to woody perennial cover (3% for biodiversity)
- 50% of remnant vegetation protected and fenced
- 8% of all cleared land planted to non-woody perennials
- 30% of all salt land to have perennial cover
- 10% of suitable land to have surface water control (eg grade banks, shallow w-drains)
- monthly monitoring and reporting of 360 piezometers in the basin
- 15% of farmers implementing high water use farming systems

Medium:
- 95% of farmers aware of water balance targets and hydrology
- 20% of private land vegetated to woody perennial cover (8% for biodiversity)
- 75% of remnant vegetation protected and fenced
- 10% of all cleared land planted to non-woody perennials
- 75% of all salt land to have perennial cover
- 25% of suitable land to have surface water control
- monthly monitoring and reporting of 360 piezometers in the Blackwood Basin
- 50% of farmers implementing high water use farming systems

Long:
- 100% of farmers aware of water balance targets and hydrology
- 30% of private land revegetated to woody perennial cover (18% for biodiversity)
- 100% of all remnant vegetation protected and fenced
- 30% of all cleared land planted to non-woody perennials
- 100% of all salt land to have perennial cover
- 75% of suitable land to have surface water control
- monthly monitoring and reporting of 360 piezometers
- 100% of farmers implementing high water use farming systems

2. PRESERVATION AND RESTORATION OF BIODIVERSITY TARGETS

Objective: *Protect and manage all remnant vegetation, revegetate 18% of cleared land for biodiversity and link corridors across the Basin. Long term preservation of biodiversity in a secure conservation network covering 15 to 20% of the Basin.*

Short term:
- 50% of private land remnants (>20 ha) managed, protected and fenced
- 3% of land vegetated for biodiversity enhancement
- 50% of remnants (<20ha) of significant conservation value protected and fenced
- prepare corridor development plans for 5 action zones

Medium:
- 8% of land vegetated for biodiversity enhancement
- 50% of significant conservation value remnants linked to other areas of remnants
- 100% of remnants (>20 ha) managed, protected and fenced
- 75% of remnants (<20ha) managed, protected and fenced

Long:
- 18% of land vegetated for biodiversity enhancement
- 100% of remnant vegetation managed, protected and fenced
- Basin network of vegetation corridors linking remnant and riparian vegetation

Revegetation for biodiversity purposes to be local indigenous species, full range of structural classes and a large number of species.

3. RIPARIAN MANAGEMENT TARGETS

Objective: *Manage riparian zones in a sustainable way to protect them (in present condition, at least) for biodiversity and bank stability with a mix of stream condition grades.*

Short term:
- 30% of first order streams managed sustainably
- 50% of second order streams managed sustainably
- 60% of third order streams (and fourth and fifth order) managed sustainably
- 10% of suitable land to have surface water control (ie grade banks in duplex slopes, shallow w-drains in valleys) and controlled discharge to natural drainage
- minimum breakdown of riparian condition for each zone:

b1 10% b2-3 20% c1 50% c2 - d3 50%

Medium:
- 50% of first order streams managed sustainably
- 70% of second order streams managed sustainably
- 90% of third order streams (and greater ie. fourth and fifth order) managed sustainably
- 25% of suitable land to have surface water control and controlled discharge to natural drainage
- minimum breakdown of riparian condition for each zone:

b1 20% b2-3 30% c1 50% c2 - d3 50%

Long term:
- 95% of first order streams managed sustainably
- 95% of second order streams managed sustainably
- 95% of third order streams (and fourth and fifth order) managed sustainably
- 75% of suitable land to have surface water control and controlled discharge to natural drainage
- minimum breakdown of riparian condition for each zone:

a 10% b1 20% b2-3 30% c1 35% c2 - d3 5%

Functional buffer widths for riparian corridors are recommended as follows:
order 1-3 (50 to 150 m) order 4-5 (30 to 50 m) order 6 (5 to 30 m)

Fencing status will be surveyed to determine if stream is fenced and if stock have access. The need for additional fencing will be assessed on an individual basis to optimise flood conveyance, erosion prevention and biofiltering to reduce nutrient loads. In some cases light or strategic grazing will be beneficial to control weeds and reduce fire hazard.

4. WATER QUALITY TARGETS

Objective: *Improve water quality in the Blackwood Basin to reduce eutrophication, improve aquatic habitat and general river health.*

Short term:
- continuous gauging stations established at each zone outlet
- reduce the present rate of increasing salinity of the Blackwood River from 52 mg/l per year to 30 mg/l per year
- total nitrogen levels to remain at 1997 levels (minimum level)
- total phosphorous levels to remain at 1997 levels (minimum level)

Medium:
- reduce the rate of increasing salinity of the Blackwood River to 10 mg/l/year
- reduce total nitrogen levels by 2 mg/l (if above 5 mg/l) and reduce by 1 mg/l (if below 5 mg/l) from 1997 levels
- total phosphorous levels to be reduced by 0.2 mg/l from 1997 levels

Long:
- decreasing salinity rate of the Blackwood River (downward trend after peak ~30 years)
- reduce total nitrogen levels to Australian and New Zealand environment and Conservation Council (ANZECC) 1992, guidelines (<0.75 mg/l)
- reduce total phosphorous to ANZECC 1992, guidelines (<0.1 mg/l)

5. ENVIRONMENTAL WEEDS TARGETS

Objective: *Manage environmental weeds in the Blackwood Basin by preventing the introduction of new weed species and controlling or eradicating existing environmental weeds.*

Short term:
- significant (existing and potential) weed problems identified and assessed
- environmental weed strategy and action plan developed including guidelines for restoration of vegetation
- control of weed threats to remnant vegetation with significant conservation value

Medium:
- environmental weed strategy incorporated into all zone action plans

Long:
- environmental weeds controlled to have no adverse impacts on native biota

6. GROUP DEVELOPMENT, COORDINATION AND COMMUNICATION

Objective: *Coordinate and communicate natural resource activities in an integrated way across the Blackwood Basin to achieve ecological, economic and social sustainability.*

Short term:
- visible and democratic structure for community input into the BCCG
- 5 zone action plans developed with implementation started
- focus sub-catchments chosen for 5 zones
- Blackwood Regional Initiative Phase Three developed
- local community landcare coordinators employed on zone boundaries
- Blackwood communications strategy implemented
- Blackwood environmental education strategy implemented

Medium:
- 9 zone action plans developed and implementation underway
- local community landcare coordinators employed on zone boundaries

Long:
- develop a fully integrated planning, management and implementation process for the Blackwood Basin to ensure future ecological, economic and social sustainability
- 9 zone action plans implemented

3. Building on experience – the Zone Management System

3.1 A New Approach to Strategic Planning

The Blackwood Catchment Coordinating Group has produced a new planning framework, the Blackwood Zone Management System, that will:

- provide a **context** for collective decision-making to improve confidence that on-ground activities are relevant and appropriate,
- **clarify the roles** and **responsibilities** of stakeholders,
- direct **resources** to the most appropriate activities and locations in the landscape.

This framework has evolved through community consultation, group and individual on-ground experience, information generated in the current BCCG Regional Initiative, and scientific data drawn from the latest spatial data mapping technology. The aim is to overcome barriers to landcare that stem from past planning processes.

3.2 Addressing Barriers to Landcare Adoption

The BCCG Community Grants Program has been highly successful in stimulating landcare activity through financial assistance to community groups for on-ground works. A review of this program identified potential for improvement by addressing issues related to planning. The BCCG's approach to planning has been typical of many catchment groups with planning mainly done at two levels: local and basin. At the local level farmers and catchment groups have planned landcare activities aimed at local issues, but in most situations this has been done without reference to a broader basin plan that defines:

- the nature and extent of the challenge in different areas of the basin
- priorities for action
- roles and responsibilities of stakeholders
- resource requirements and cost-sharing arrangements.

Without working within the bigger picture of a basin plan it has been hard for groups and individuals to relate activities in their local catchment to those elsewhere in the basin and resources may be directed to areas of relatively low priority in a regional context or to inappropriate activities.

At the basin level, planning has focused on identifying the major issues of concern to the community, establishing priorities for action and quantifying targets. The planning process has had limited progress in moving beyond defining these broad objectives and conducting specific technical tasks relating to salinity, nutrient management and vegetation options.

The difficulty with basin-scale planning is not surprising given the size of the Blackwood Basin and the complexity of the issues. As the Blackwood Basin is biophysically diverse and supports a range of industries and social groups, there will be few solutions that can be universally applied across the basin because they need to be relevant to the local situation.

The BCCG identified that to deal with these challenges a more sophisticated planning approach would help the Group broaden its scope to:

- incorporate a wider array of issues,
- incorporate long term goals to acknowledge that solutions don't happen overnight,
- include the diverse range of stakeholders,
- acknowledge the varying levels of understanding in the community of the extent of the challenge and what is required to achieve sustainable outcomes in the basin,
- encompass the biophysical, social and economic variation across the basin.

3.3 Six Levels of Planning in the Blackwood Basin

The BCCG's new approach defines planning and responsibility levels at site, local, catchment, zone, basin and regional level. Each of these planning levels relates to a location in the landscape, as illustrated in Figure 4 which shows how each planning level is a subset of the level above so the information and plans of each are consistent.

An outline of issues and tasks to be addressed at each level of the planning framework, or Zone Management System, and the mechanism for information feedback between the levels is presented in Section 8 Planning Levels in the Blackwood Zone Management System. The stakeholders involved at each level of planning are identified in Table 1 with details of the area of land associated with each planning level and the product of the planning process.

Table 1: Planning and responsibility levels in the Blackwood Zone Management System

Planning Levels	**Area (hectares)**	**Primary Decision Makers**	**Planning document**
Regional (South West)	23 million	SW Regional Coordination Committee, Government Natural Resource Management agencies, Local Government Authorities, Development Commission, Regional Organisation of Councils	Regional Strategy
River Basin (Blackwood)	2.2 million	Blackwood Catchment Coordinating Group	Strategic Plan
Zone	100,000 to 350,000	Zone Group (representatives of Land Conservation District Committees and special interest groups) Local Government	Zone Action Plan
Catchment	10,000 to 40,000	Catchment Group and special interest groups	Catchment Action Plan
Local (Farm, nature reserve)	1,000 to 5,000	Land Manager (public or private land owners)	Property Management Plan
Site (Block, paddock)	10 to 100	Land Manager	Site Plan and Implementation

Planning at the **zone level** is unique to the BCCG Zone Management System, created to ensure that solutions to the major landcare problems are appropriate to local circumstances.

Nine zones have been generated by dividing up the basin on the basis of biophysical and social parameters, such as surface hydrology, vegetation systems, soil type, topography, industry type and social catchment boundaries (Figure 5). Each zone contains between 9 and 15 catchment groups and 100 to 350 individual land managers, and encompasses between 3 and 7 local government authorities (Figure 6). The exact boundaries of the zones are not set in concrete and can be altered to cater for local landholder and group needs.

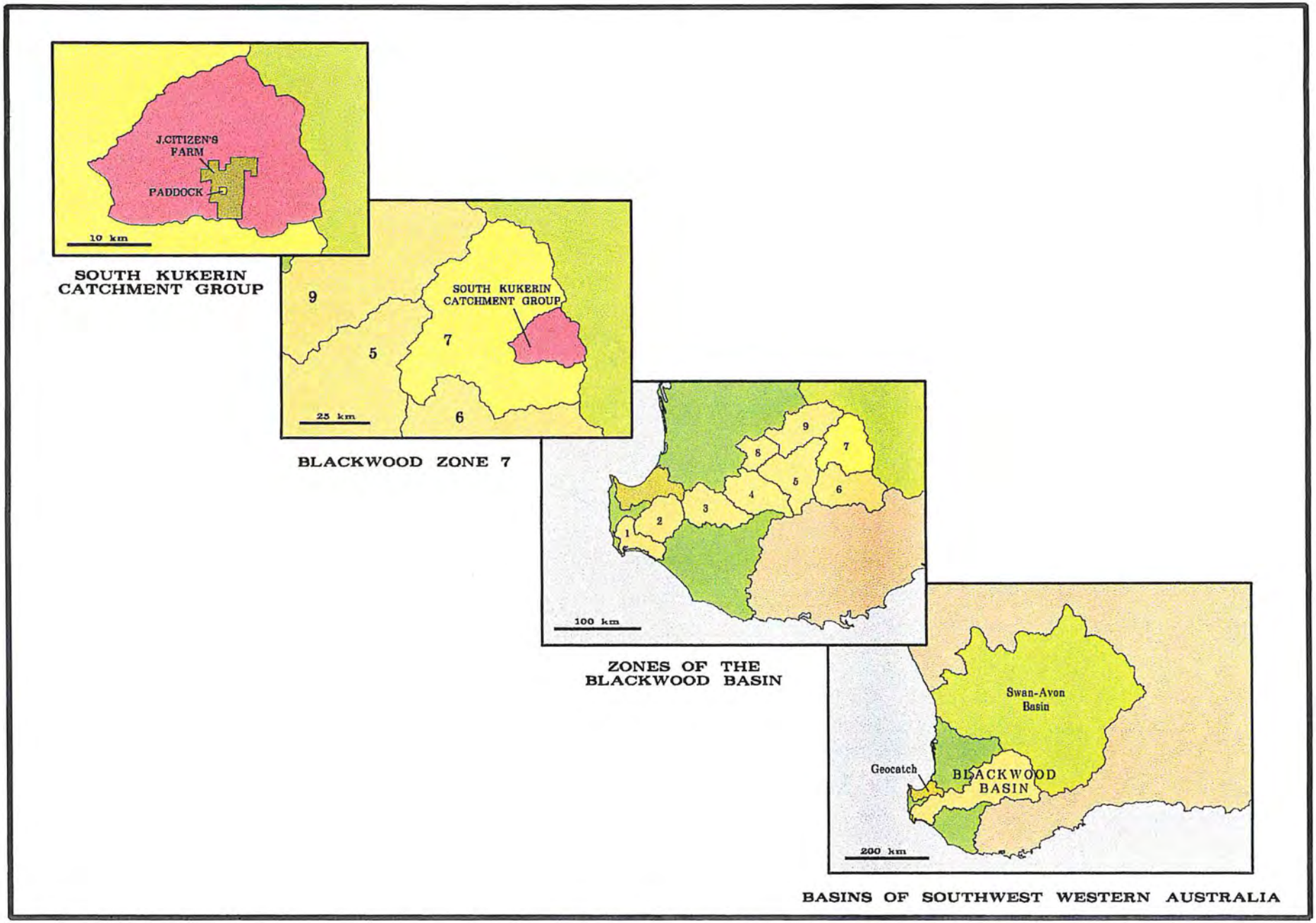


Figure 4 :Levels of Planning in the Blackwood Basin.

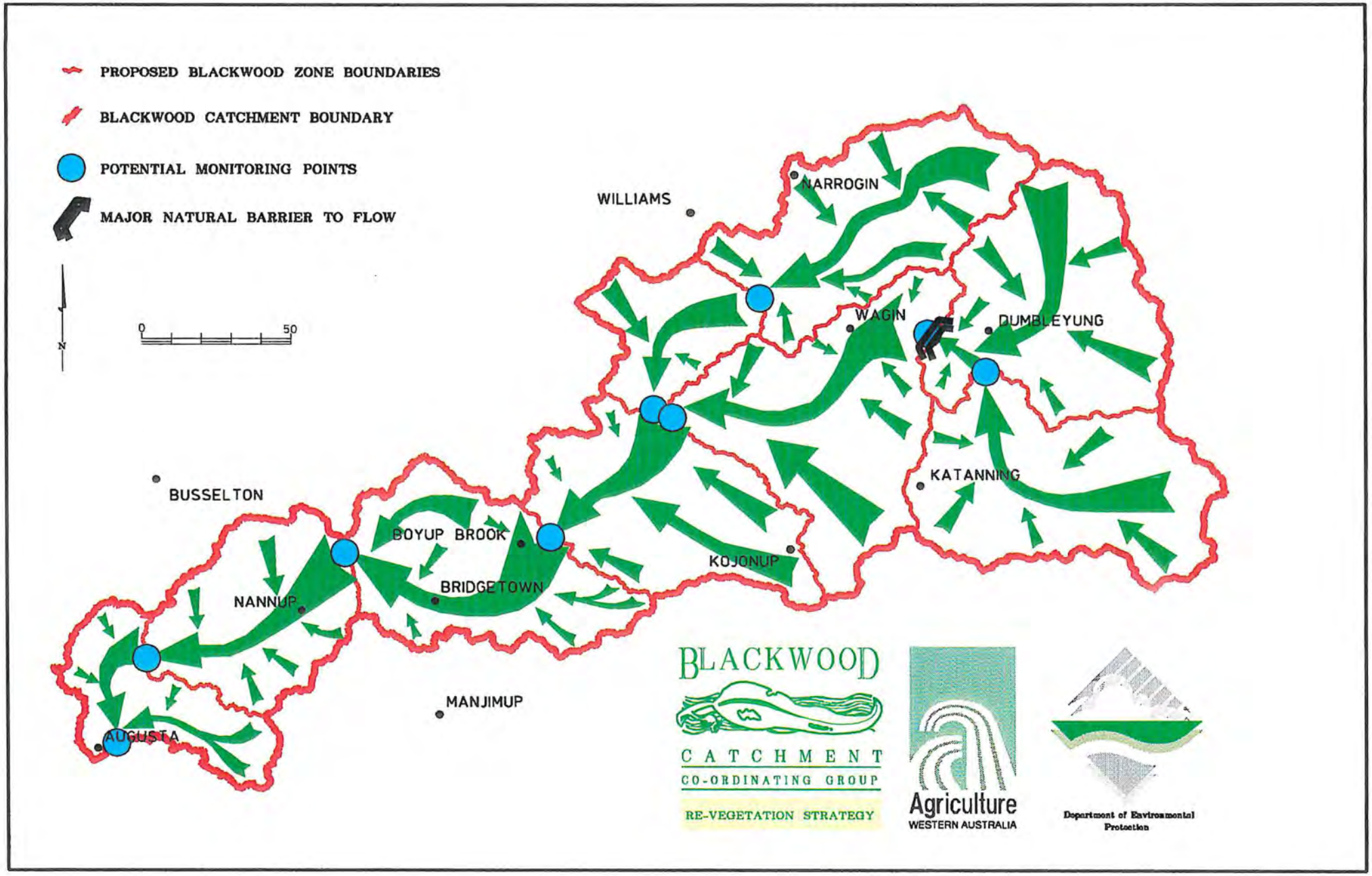


Figure 5 :Surface Hydrology on Blackwood Zones.

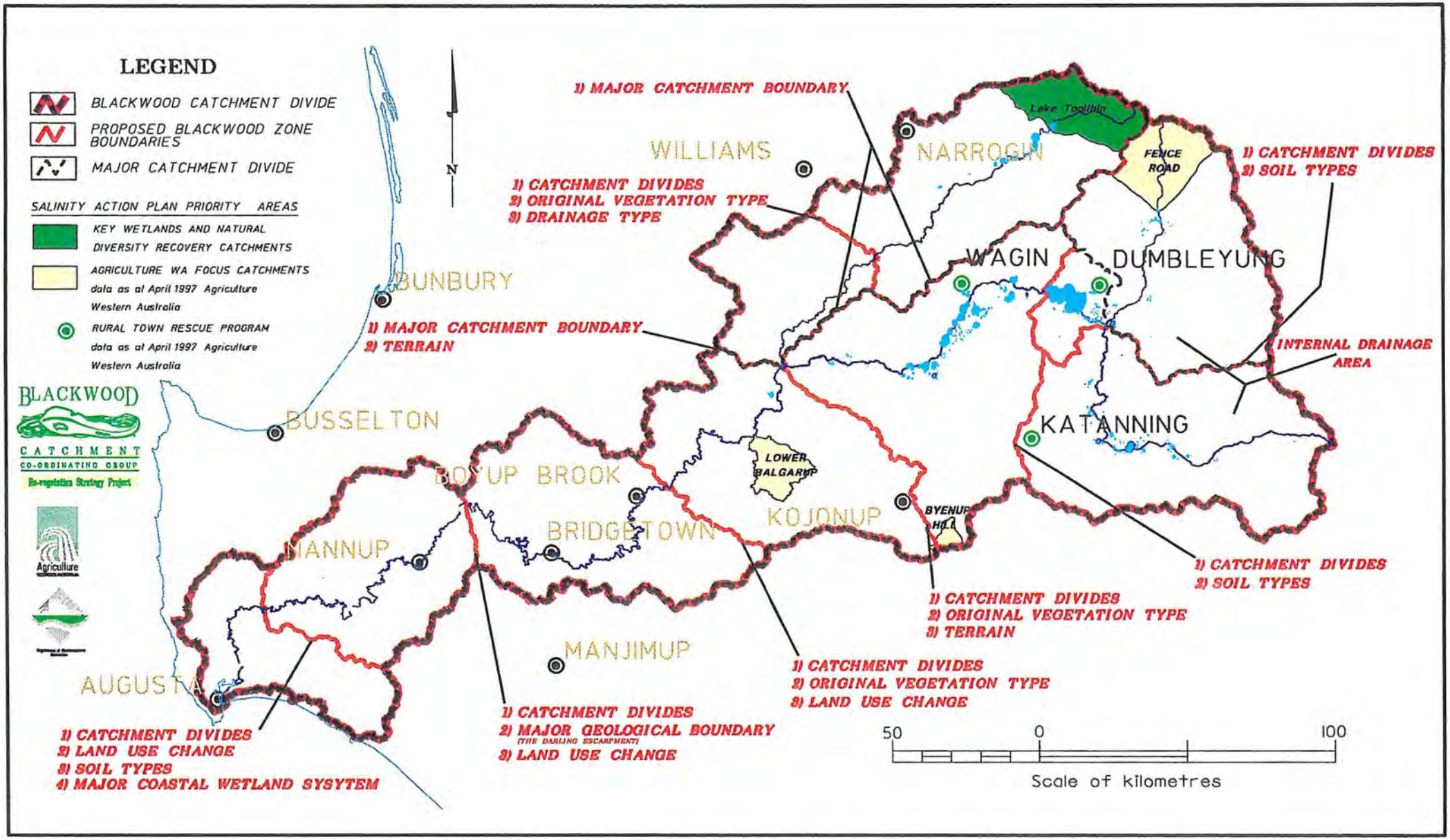


Figure 6 :Proposed Zonal Boundaries of the Blackwood Basin.

4. Strategic On-ground Delivery Programs

The Blackwood Basin Securing the Future proposal presents a range of projects under two areas: **Strategic On-ground Delivery Programs**, outlined in this Section, and **Program Support Projects** in Section 5 which are the essential services that support the on-ground work. These two Sections provide a summary of each project while detailed proposals appear in Section 7.

The breakdown of the funding sources for the Blackwood Regional Initiative is shown in Graph 1, while the proposed funding for the Strategic On-ground Delivery Programs or implementation projects in this proposal is shown in Graph 2. These implementation projects provide strategic delivery mechanisms for achieving a comprehensive, integrated, accountable, community managed process for on-ground works in the Blackwood Basin.

On-ground works will be prioritised through Zone Action Plans according to the Blackwood Basin's targets (see Section 3) and cost-sharing arrangements will be based on a benefit-cost analysis of works.

The Blackwood Catchment Coordinating Group set a national precedent with its Community Partnerships project by efficiently delivering resources on-ground with maximum community ownership and management. Building on this experience of equitable and accountable funding delivery on-ground, the BCCG will achieve its targets for natural resource management through five **Strategic On-ground Delivery Programs**:

1. **Zone Action Plan Implementation**
2. **Strategic Implementation for Remnant Vegetation Management**
3. **Community Start-Up Incentives Scheme**
4. **Protecting High Value Public Assets**
5. **Dongolocking Revegetation Project**

The Zone Action Plan Implementation Program will be the main delivery mechanism for funding on-ground activities across the Blackwood Basin. A transition to the new planning and implementation framework Zone Management System, where the major focus is on zones, will occur gradually. As new Zone Action Plans are progressively formed and implemented over five years, there will be a need to maintain the community's enthusiasm and motivation for landcare. It is important to consider equity issues during this staged transition and implement other programs across the basin, before all of the Zone Action Plans are developed.

4.1 Zone Action Plan Implementation

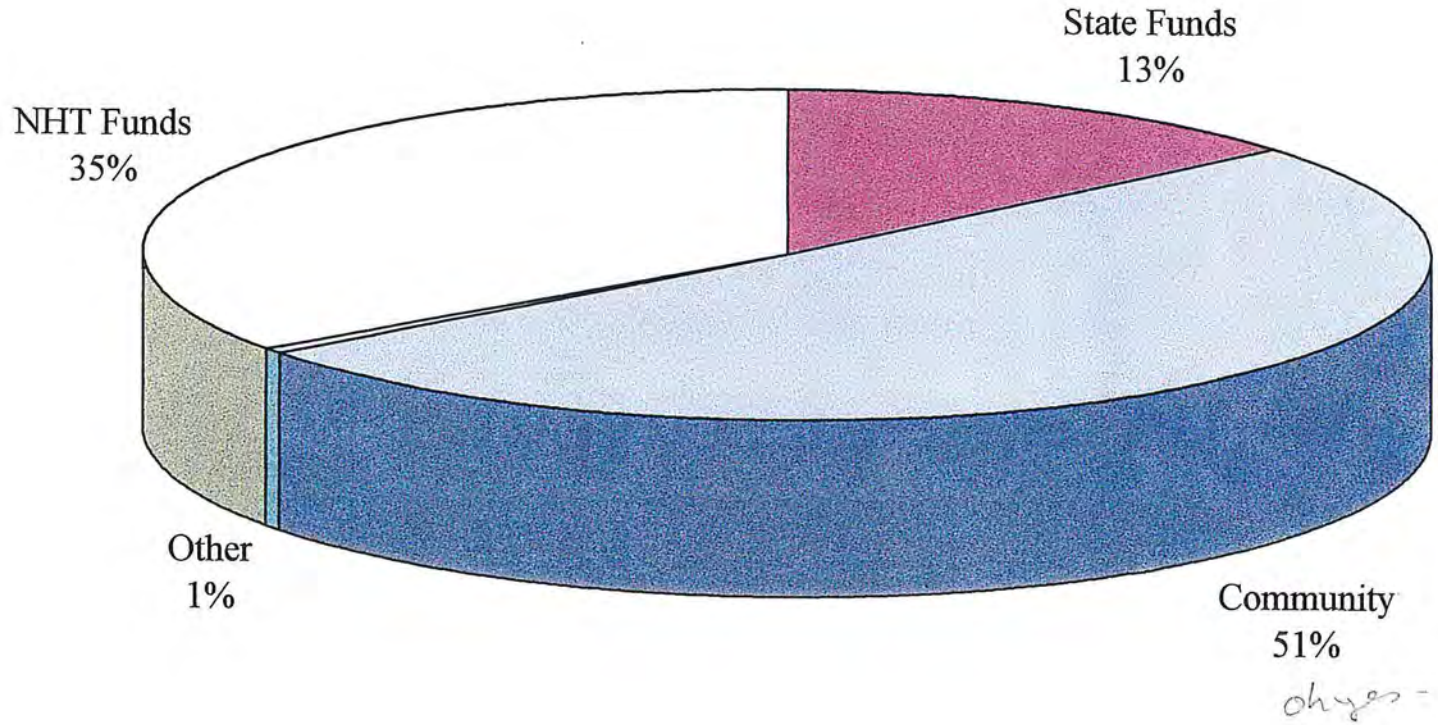
Program Development

A Zone Action Plan will be developed for each zone based on the Local Action Plan of the Coorong and Districts in the Murray-Darling Basin. The individual Zone Action Plans will be prepared in stages over a five year period so experience can be shared between zones, which should reduce the time needed to develop Zone Action Plans. Development of a Zone Action Plan began in the Dumbleyung Zone in early 1998.

The specific tasks for developing the Zone Action Plans are:

1. Calculating zone **targets**, based on local issues and consistent with basin targets.
2. Assessing **options** for activities to address those zone targets.
3. **Prioritising** the activities and defining **critical locations** for greatest attention.
4. Devising **cost-sharing** arrangements for public and private resources to overcome take-up barriers through a cost-benefit analysis.
5. Formulating a **monitoring and evaluation** program to assess the success in achieving targets.

Blackwood Regional Initiative
Funding Sources



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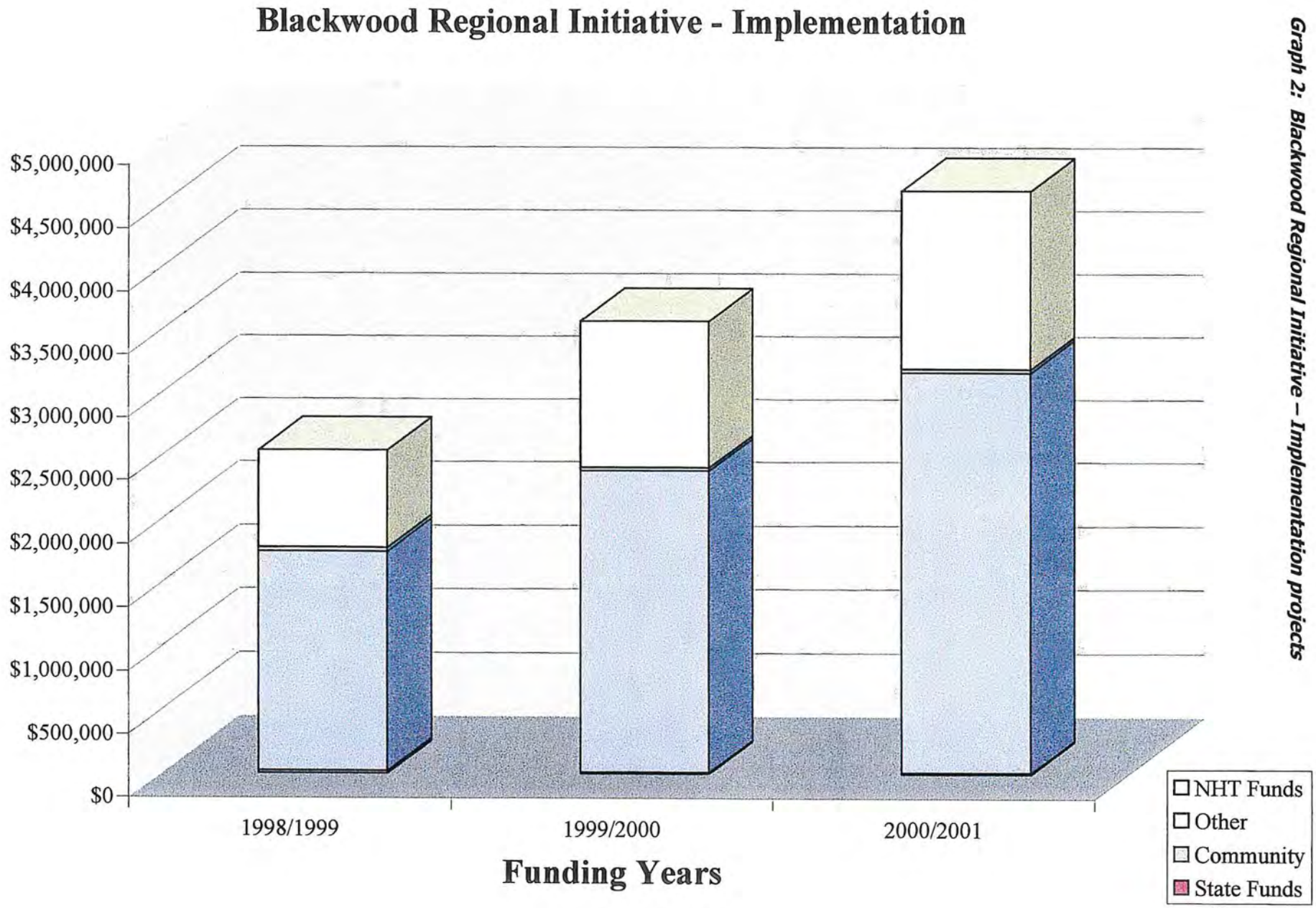
Graph 1: Blackwood Regional Initiative Funding Sources



Graph 2: Blackwood Regional Initiative – Implementation projects

Implementation

Once the Zone Action Plan is written an incentive scheme will drive the implementation and this involves:

1. Inviting **catchment groups** to submit catchment plans.
2. Assessing these proposals for **compliance with the Zone Action Plan**.
3. Recommending **distribution of funds** by the BCCG to farmers that describes the action, responsibilities, and the payment structure.
4. Providing on-ground **assistance and advice** for local conditions, using local expertise and information gained from research and experience particularly through the State Salinity Action Plan Focus Catchment Program.

Focus Catchments

A Focus Catchment will be selected within each zone for intensive investigation and concentrated technical support, as devised in the WA State Salinity Action Plan. An important activity will be to identify potential commercial options for addressing land degradation under local conditions. A range of commercially viable solutions that can be built into existing farming systems will accelerate progress towards a sustainably managed landscape.

Currently there are three catchments nominated as Focus Catchments, including Fence Road, Byenup Hill and Lower Balgarup. There is one recovery catchment, Lake Toolibin and three rescue towns; Katanning, Wagin and Dumbleyung.

Refining the Zone Action Plans

The Zone Action Plans need to be refined with input from Focus Catchments, local knowledge and experience with on-ground activities. The Zone Action Plan objectives, targets and incentive scheme will be refined using tools and facilitation processes. This will build on the outcomes of the Adaptive Management model conceived as part of the current Blackwood Regional Initiative.
Specific technical and demonstration projects will also run in the zones to provide local information on critical issues which will help to further refine the Zone Action Plan.

Roles and Responsibilities

Zone Action Committees will develop and implement the Zone Action Plan. Groups will include representatives of Land Conservation District Committees, local government and special interest groups.

While the Groups will receive technical support from government agencies through the State Salinity Action Plan, they will function as autonomous groups within the basin reporting to the BCCG for endorsement. The Zone Action Committee will select the focus catchment for their zone in accordance with the State Salinity Action Plan.

A representative of each Zone Action Committee will be appointed to the BCCG. This representative will provide a direct path for transfer of information between the Committee and the BCCG.

Advantages of Zone Action Plan Implementation

The advantages of concentrating the delivery of on-ground funding through the Zone Action Plan Implementation program are:

1. Potentially a significantly **larger number of farmers** could be involved than was possible under the Community Partnerships project.

2. The Zone Action Plans will focus on **local** issues relevant to the people on the ground and will have strong **community ownership**.

3. The program avoids an additional layer of administration by using the **existing organisational structures** of the Land Conservation District Committees, Local Government Authorities, catchment and community groups to develop and implement the Zone Action Plans. Stakeholders can operate within an agreed decision-making framework and be pro-active on natural resource management.

4. The zone concept is **transferable** and could be used in other basins and regions in Western Australia and Australia, for example the Swan-Avon and South Coast.

4.2 Strategic Implementation for Remnant Vegetation Management

The importance of Remnant Vegetation

Seventy per cent of the Blackwood Basin has been cleared and of the remaining vegetation only 30% occurs on private land. In the upper catchment remnant vegetation is scattered and may account for only 3% of the land area. The BCCG recognises it is fundamentally important to protect the remaining pockets of remnant vegetation as this will be crucial for maintaining:

- Regional water balance.
- Farm productivity.
- Landscape amenity.
- Biodiversity.

Previous Activities

Considerable resources have been invested in remnant vegetation protection and management activities over the past decade. These actions have involved various bodies including the BCCG, the Department of Conservation and Land Management, Agriculture WA, Water and Rivers Commission and the Department of Environmental Protection, and the outcomes include:

1. Mapping remnant vegetation across the basin with information integrated into a Geographic Information System (GIS) database.
2. Surveying the condition and pressure on remnant vegetation.
3. Developing a Blackwood Basin Atlas detailing the vegetation and natural resources.

In addition to the on-ground works carried out by individual land managers more than 1,600 hectares of remnant vegetation has been fenced over the past three years under the Community Partnership project.

Priorities

A process for setting priorities for remnant vegetation protection in the basin was developed under the 'Save the Bush', a joint Agriculture WA – Conservation and Land Management project which ranked vegetation according to:

- Size of remnant.
- Area to boundary ratio.
- Proximity to conservation reserves.
- Conservation value.

The Strategic Implementation for Remnant Vegetation Management project will achieve the Basin target of fencing 50% of remnants on private land greater than 20 hectares in the next three.

4.3 Community Start-Up Incentive Scheme

Previous Activity

There are 150 catchment groups operating within the Blackwood Basin but these groups vary in their level of activity and cohesiveness. A survey, under the 1997 Strategic Revegetation project, of 90 catchment groups found that low group activity may be caused by:

- Absence of a Landcare Coordinator which is seen as crucial for motivating groups and helping the group towards cohesion and self-management.
- Lack of financial incentives to kick-start activity.
- Inappropriate catchment boundaries.
- Absence of strong leadership.
- Diversity of opinions and ideas regarding landcare priorities.
- Absence of technical breakthroughs.
- An aging population.

The survey identified areas in the basin where no organised catchment groups existed and where there was low activity due to these factors (See Figure 7).

Priorities

Proactive measures are urgently required to help new groups to form. The Community Start-up Incentives Scheme will address the Basin target to have active catchment groups covering 80% of the basin within five years. Currently 60% of the Basin is covered by active catchment groups. The objective of the Scheme is to achieve the target by helping 40 new catchment groups to get started, with a focus on areas where high value public assets are at risk.

4.4 Protecting High Value Public Assets

Priorities

Where groups are not located in one of the five zones developing and implementing a Zone Action Plan over the next three years, it is imperative that they are supported in achieving on-ground outcomes and protecting high value public assets that are at risk from land and water degradation. These public assets include environmental assets such as wetlands of high conservation value, social assets such as recreational areas, and economic assets such as infrastructure and services.

A number of larger projects will be funded to address priority issues on a catchment scale. These will be vital to the continuing work of established catchment groups, who have functional catchment plans in place and identified solutions to local issues, in line with Blackwood Basin targets.

The threat to rural infrastructure, including towns, from rising ground water tables has been identified in the WA State Salinity Action Plan. Funding may be directed to local government authorities to address rising water tables through strategic revegetation once the salinity risk to the town has been identified and a plan is in place to address these issues (as recommended in the Salinity Action Plan).

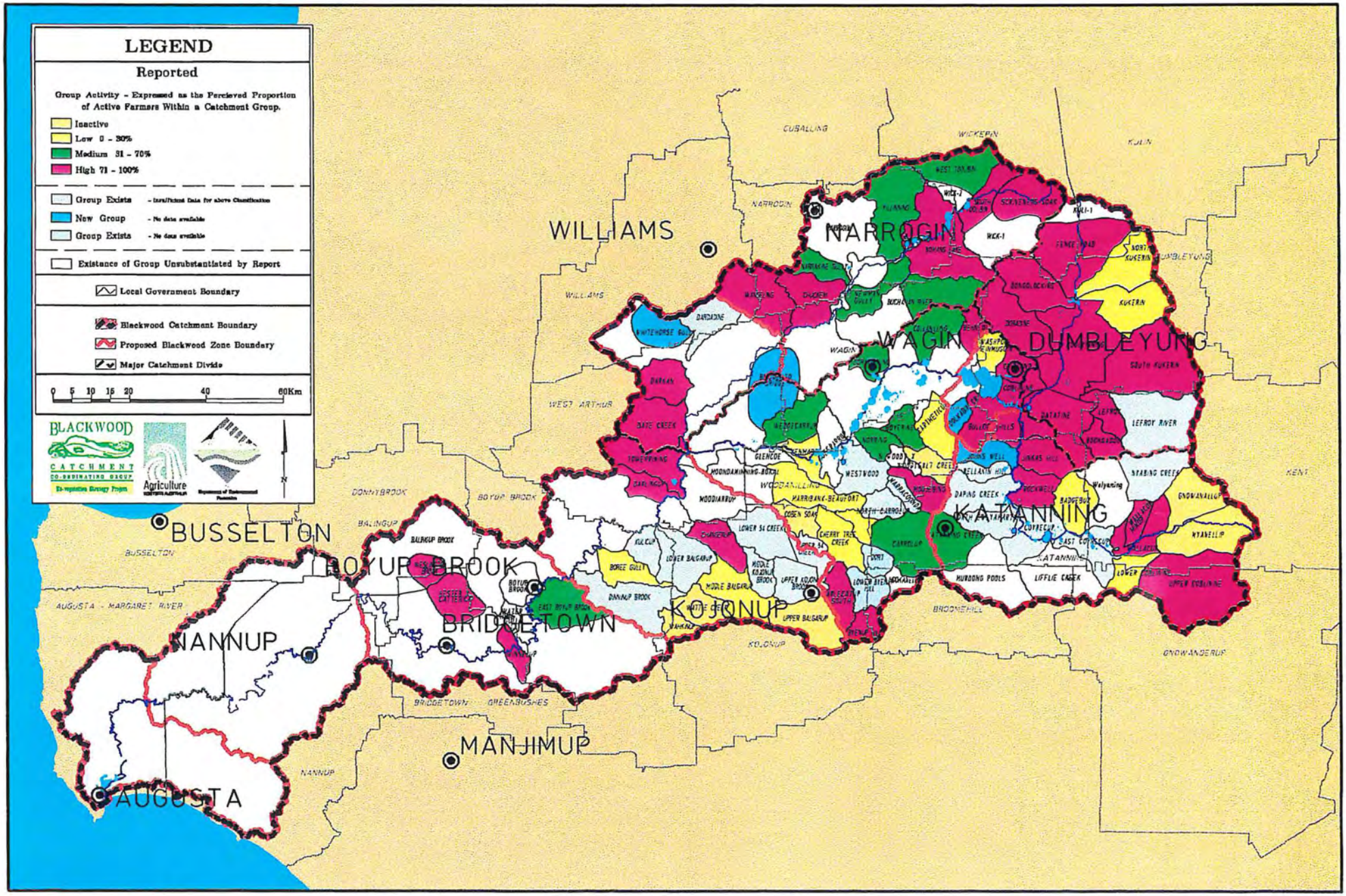


Figure 7 :Catchment Group Activity Within the Blackwood Basin.

4.5 Dongolocking Revegetation Project

Dongolocking is situated within the Shire of Dumbleyung in the far north east of the Blackwood Basin. Recently this area has provided a focal point for the management and protection of remnant vegetation on both Crown and private land through an innovative project managed by Conservation and Land Management and funded through the Land and Water Resources Research and Development Corporation. This project is a component of a much larger south west project which has national and state significance.

The initial phase of the Dongolocking project focused on developing a broad framework and process of planning as well as devising landscape specifications for revegetation. This phase is still being finalised. The latest phase, which includes this proposal, aims to implement the on-ground actions devised in the initial phase of planning and where necessary incorporate further research and stream-line the implementation process to make it more effective.

The main aims of this project are to integrate nature conservation with productive, sustainable land use at local, landscape and regional scales, and manage the remnant native vegetation and surrounding lands so that existing native biota persists in the long term.
This project compliments the basin-wide 'Strategic Implementation for Remnant Vegetation Management' project by focusing on the development of a technical process for determining a methodology for biodiversity and reconstruction of remnant vegetation. It also compliments another BCCG technically based project, 'Assessing Water Management Plans for Focus Catchments' which aims, in part, to utilise vegetation to achieve hydrological balance within the basin.

Table 2: Project descriptions of activities in the Strategic On-ground Delivery Program

	Zone Action Plan Implementation	**Strategic Implementation for Remnant Vegetation Management**	**Community Start-up Incentive Scheme**	**Protecting High Value Public Assets**
Vegetation				
Re-establishing native vegetation	✓	✓	✓	✓
Conserving/fencing remnant vegetation		✓		
Fencing for regeneration	✓	✓	✓	
Facilitating farm forestry	✓		✓	
Revegetation in riparian zones	✓		✓	✓
Revegetation for groundwater management	✓		✓	✓
Revegetation for erosion control	✓		✓	
Water				
Streambank stabilisation	✓	✓	✓	
More appropriate/efficient water use techniques and systems	✓			
More sustainable management of riparian zones	✓		✓	
Improving river and wetland health	✓			✓
Improved drainage systems	✓		✓	✓
More efficient/appropriate use of groundwater	✓		✓	
Land				
Implementation of more sustainable management practices / systems	✓		✓	✓
Pest plant and/or animal control	✓	✓		
Biodiversity				
Covenanting or incentives for biodiversity conservation		✓		
Improving wildlife habitat	✓	✓	✓	
Improving management of threatened species		✓		
Removing threats to threatened species or ecological communities		✓		✓

5. Program Support

The Strategic On-ground Programs will be backed up and delivered through the Program Support Projects that include:

1. Basin Coordination
2. Zone Coordination
3. Information Management
4. Monitoring and Evaluation

The breakdown of the relative funding sources proposed over the next three years for Program Support projects is shown in Graph 3.

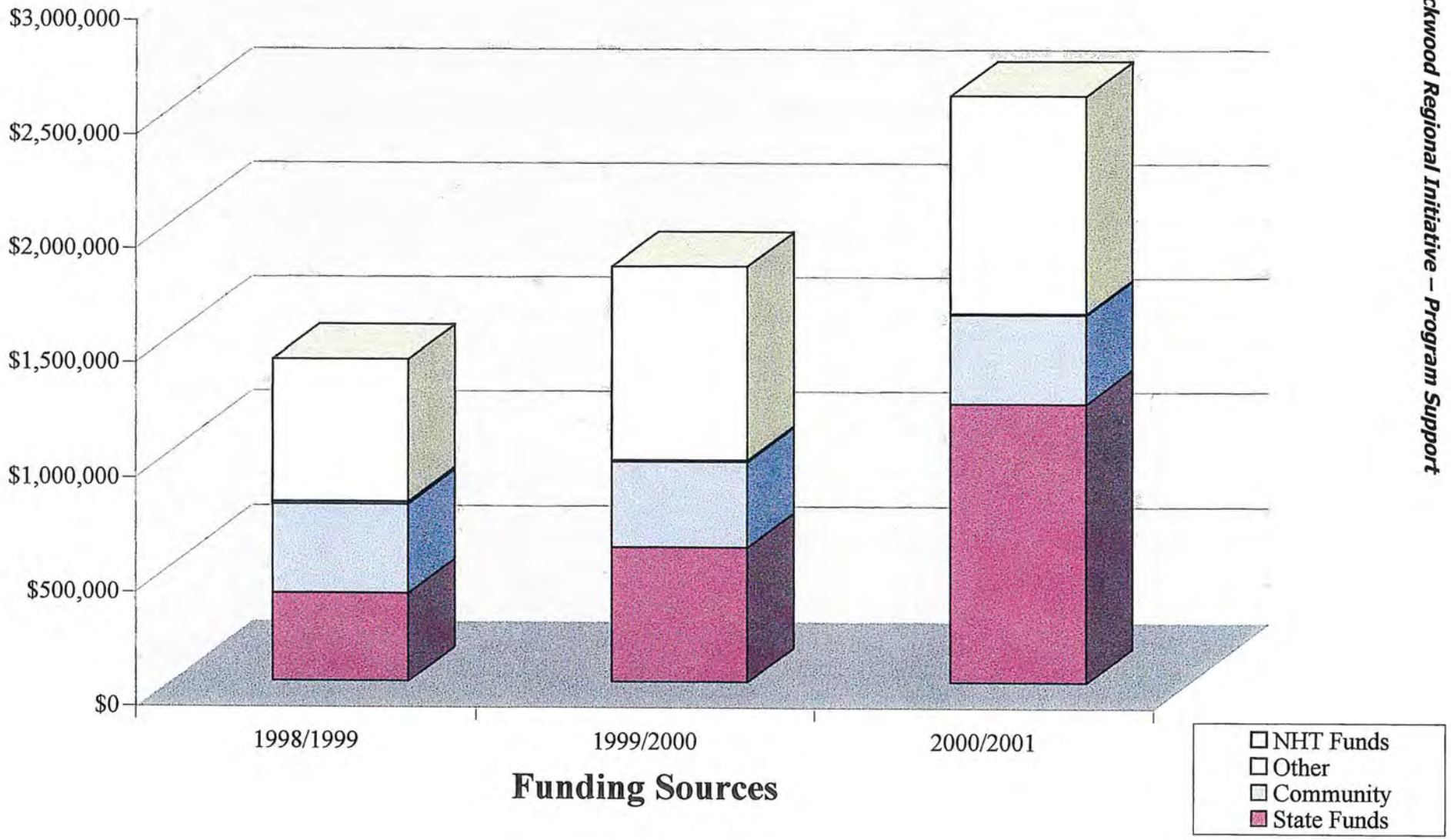
5.1 Basin Coordination

From the new Zone Management System the BCCG has developed a framework of coordination and leadership to optimise results on-ground at all levels in the Blackwood Catchment (Figure 8). Coordination, communication and leadership at each level of responsibility is needed to improve operating efficiencies and accelerate outcome-focussed activity.

Figure 8 Leadership and Coordination in the Blackwood Basin

Leadership	Coordination
BASIN	
BCCG Chairperson	Program Management
BCCG Deputy Chairperson	Executive Support
BCCG Members	Implementation Coordination
	Regional Bushcare Facilitation
	Communications
	Environmental Education
	Weeds Strategy
	Funding for the future
ZONE / LCDC	
Zone Action Committee	Landcare Coordination
LCDC Chairpersons	Landcare Technical Support
LCDC Members	Bushcare / Land for Wildlife Support
Local Government Shire Presidents	Zone Action Plan Development and Extension
Local Government Councillors	
CATCHMENT	
Catchment Coordinators	Landcare Coordination
	Bushcare / Land for Wildlife Support
	Focus Catchment Technical Support
PROPERTY	
Land Managers	Landcare Technical Support
	Bushcare / Land for Wildlife Support
	Focus Catchment Technical Support
	CALM and AGWA Commercial Vegetation Services

Blackwood Regional Initiative - Program Support



Graph 3: Blackwood Regional Initiative – Program Support

Areas of responsibility in Basin Coordination

To deliver the work proposed in the Strategic On-ground Delivery Program the BCCG has nine distinct areas of responsibility at the Basin level.

1. Critical to the success of meeting catchment targets are the **linkages** needed to create synergy and efficiency in the program. The BCCG's Regional Initiative **Program Manager** position underpins effective regional coordination and strategic development, maintains the bigger picture and ranges in its multi-faceted role from generating community participation to coordinating allocated community and government agency resources to meet catchment targets.

2. The second area of responsibility involves coordinating the five implementation programs. The **Implementation Coordinator** will manage on-ground activity to secure public environmental benefits, ensure equitable distribution of funds and maintain accurate accountability of investment. This role is pivotal in working with local coordinators to provide consistent delivery of funds across zones while maintaining an accurate and central reporting, monitoring and evaluation function.

3. The **Bushcare Facilitator,** a joint initiative funded through Environment Australia and supported by the Western Australia Department of Conservation and Land Management, will assist the remnant vegetation protection program to specifically meet remnant vegetation biodiversity basin targets. The Facilitator will work closely with other natural resource managers to provide technical advice on sustainable native vegetation management, encourage collaborative efforts and improve information exchange on biodiversity management.

4. Communication is linked to the BCCG's coordination role, and is a key factor in the success of projects in being able to translate and distribute useful information to different audiences through a range of mediums. A communications strategy for the Blackwood Basin is being developed through the current Communications Project (Regional Initiative).

Communication is currently provided by a Communications Officer through a contractual arrangement with a communications firm to provide press releases, manage media liaison with press, television and radio, produce a twice yearly broadsheet to 14,000 households, maintain a strong profile at all agricultural and community shows in the catchment, perform market research and produce brochures and documentation for a range of audiences.

A communications contract is proposed to implement the Communications Strategy to deliver a strong communications network in the Blackwood, provide necessary communication support to the BCCG, and inform and inspire land managers to actively participate in sustainable land management. The communications network needs to link all telecentres, landcare offices, Community Agricultural Centres, Shire offices, agency offices of Agriculture WA, Conservation and Land Management and the Water and Rivers Commission.

5. The BCCG is addressing the demand for **environmental education** by producing the Blackwood Draft Environmental Education Strategy (1997). The Conservation and Land Management representative to the BCCG and the Communications project, through the Regional Initiative, provided resources to prepare the document and the completed strategy will be published soon.

The next step is to prepare an action plan for environmental education that prioritises activities over a three year period and specifies the resources needed and how those resources will be acquired. It is anticipated that as part of the BCCG's contractual arrangements for communications this task will be completed within six months followed by its implementation.

6. Executive and financial support are critical to program implementation and development. This critical function at the basin level is presently resourced through the lead state government agency, Agriculture WA, within their Sustainable Rural Development Program for catchment management in the south west of WA. The BCCG executive officer manages the finances of the regional initiative and all other BCCG programs, and the functions of the BCCG including organising monthly meetings, providing

minutes, preparing documentation, correspondence records and financial reports and executive support for the BCCG chairperson.

7. The BCCG is responsible for developing and implementing a **Weeds Strategy** which will be closely linked to the National Weeds Strategy and reflect strategies for weed control at the state level. The proposal is to contract a facilitator to bring together key stakeholders to identify priorities and prepare the Weeds Strategy. The second year will begin the implementation phase with a Weeds Coordinator to assist community groups and government agencies including state and local shires to work together on the strategy. The BCCG is organising a public forum in April 1998 to pursue the issue of environmental weeds in the middle and lower Blackwood Catchment, with the Tamar Valley Weeds Strategy group sharing experience of how they have tackled weed problems in a climate of reduced government spending.

8. Greater interdependence is important to pursue the 30 year plan set out in the Blackwood Basin Targets (Section 3) and a greater effort is needed to coordinate potential sponsors. The proposal is a series of contracts designed to provide critical information on potential sources of sponsorship. In addition, training of existing staff in the delivery of sponsorship proposals and management of those funds will be required. The communications service will assist in generating promotion materials and discreet programs for sponsorship. Current industry support in the Blackwood Catchment includes a Memorandum of Understanding with Bunnings Treefarms to fund a full time Watercare Program Manager, Alcoa supports the catchment coordinator in the Lake Toolibin Catchment, BP provides a fuel support program, Gwalia and Sons Mining and the Muja Power station assist with analysing water samples, and BHP Mineral Sands Mining has contributed to the employment of a Landcare Coordinator in the Lower Blackwood area. As part of the national Greenhouse Challenge program, Solar Hart will contribute up to $140,000 over five years in the Blackwood Catchment to gain carbon credits.

5.2 Zone Coordination

In the past six years landcare coordination in the Blackwood Catchment has evolved from a state agency held responsibility through Agriculture Western Australia to largely a community responsibility. The first Community Landcare Coordinator in WA was employed by the shire and community of Dumbleyung in partnership with the National Landcare Program and more recently the Natural Heritage Trust. Building on the success of community landcare coordinators this proposal facilitates the gradual shift coordinating local efforts based on natural resource zones rather than local government boundaries.

As part of the Revegetation Strategy project (current Regional Initiative) a review of the social catchment groups showed there is a strong correlation between the amount of landcare activity in catchment groups and the involvement of a local Community Landcare Coordinator.

Landcare Coordinators are key people within the Blackwood's framework who actively engage the community in sustainable land management by developing new groups, motivating and supporting landowners, and providing both youth and adult environmental education learning opportunities.

Land Conservation District Committees have been reviewing their purpose and role in the community and within the next three years these committees may parallel the evolution of coordinators from operating on local government boundaries to natural resource management boundaries. Membership is already established in many of the Land Conservation District Committees, particularly in the upper Blackwood, through sub-catchment representation.

Over the past three years as a direct result of the current BCCG Regional Initiative a strong association has developed between coordinators in the Blackwood Basin. They form part of an essential network that regularly communicate, share information and participate in common skills development and training on local and regional issues. Together they form the catalyst needed to achieve common goals in the Blackwood.

Community Landcare Coordinators are a central part of this proposal (see Section 7) that will achieve the three year targets set out by the BCCG for group development and coordination. They will help develop and implement Zone Action Plans by harnessing community participation, expectation and empowerment.

As current Community Landcare Coordinator projects finish it is essential that all areas of the Blackwood continue to be serviced. Figure 9 shows the time frame for Landcare Coordinators.

There will also be two Extension Officers employed to coordinate development of Zone Action Plans, complete with a cost benefit analysis. To extend the natural resource zones these officers will share information produced at the focus subcatchment level to other subcatchments within zones.

Environment Australia will be providing Bushcare support under contract in the near future and Land for Wildlife Coordinators will be linked to setting and meeting biodiversity targets in the Zone Action Plan development and implementation.

Investment in coordination is gradually shifting from short term sources to more permanent tenure with strong local government, community and industry support. Already one council has implemented a landcare levy to fund a landcare coordinator and other councils are following the example. Leadership within communities is mostly voluntary and while these people empower communities to be active this huge voluntary effort needs to be recognised and supported through training, development and reimbursement for expenses.

In addition to the 12 Community Landcare Coordinators in the Blackwood there are two sub-catchment coordinators who work part-time in the priority areas of Lake Toolibin and Fence Road, identified by the WA State Salinity Action Plan for immediate remedial action. These individuals work closely with state government agencies providing Focus Catchment Teams under their commitment to the WA State Salinity Action Plan. To support this work an experienced hydrologist will be employed to develop efficient water management strategies and continue implementing the Ground Water Modelling for Groups project (current Regional Initiative). This outcome focused project integrates hydrogeological, topographic and landuse data to quantify catchment water balances under differing landuse practices.

Support for landcare activities at the property level will be available as 'fee for service' provided by Community Landcare Technicians, a State association of mostly landowners qualified to deliver services such as surveying for contour banks, farm planning and monitoring land management activities. Advice services for commercial vegetation options such as oil mallees and maritime pine in the upper catchment are available through two Conservation and Land Management initiated people. The Farm Forestry Advisory Service, a joint initiative of Conservation and Land Management and Agriculture WA provides advice on suitable commercial tree options in the higher rainfall areas. To increase the effectiveness of community based farm forestry initiatives it is proposed to establish a community based network of tree farmers.

PROJECT	PERSON EMPLOYED
Coordinator @ Dumbleyung / Kulin	Claudia Hadlow
Coordinator @ Nyabing	Ron Master
Coordinator @ Katanning	Jenny Gardner
Coordinator @ Broomehill	Colleen Thomas
Coordinator @ Wickepin	Robyn Cail
Coordinator @ Narrogin / Williams	Heidi Schaper
Coordinator @ Woodanilling / Wagin	To be appointed
Coordinator @ Kojonup	Patrick Gillespie
Coordinator @ Boyup Brook	Adrian Price
Coordinator @ Bridgetown Greenbushes	Jenny Dewing
Coordinator @ Donnybrook Balingup	David Chester
Coordinator @ Lower Blackwood	Jody Gardner
Coordinator @ West Arthur	vacant
Subcatchment Coordinator @ Toolibin	Dani Sims
Subcatchment Coordinator @ Fence Road	Jan Gray
Bunnings Watercare Program	Marg Scott

Figure 9 Time frame for Landcare Coordinator projects in the Blackwood

5.3 Information Management

The way information is managed, disseminated and used is critical to adoption of management programs. New information is constantly being developed within the basin and individuals and groups need to be able to respond to and determine what information is relevant for them. The current methods are ad hoc and much information is not adopted. The BCCG aims to provide strategic support for information management by providing information management systems and decision support tools.

This project will provide the extension support without duplicating existing services. The process will start with upgrading the infrastructure and services at Dumbleyung and Boyup Brook, and will be extended to other catchment centres as Zone Action Plans are developed in each area.

Information management systems

A community education and inquiry system will be developed to improve information access, use and management via an information network accessed through the Community-based Catchment Centres. The centres will hold reports, articles, computer support, and personnel to manage the information and inquiries. Geographic Information Systems and decision support tools will be developed and utilised at these centres.

The decision support system (GIS) and facilities are required in specific locations across the basin to ensure equal access to information. These systems provide stakeholders with flexibility in planning management actions and alternative resource use options. Decision support systems available will include Adaptive Management models which have already been trialed within the basin; 'Ribbon', 'Farm Tree', 'Drains and Banks' and 'fossil P'. These centres are currently located at Dumbleyung and Boyup Brook where some infrastructure is in place.

Decision support tools

The BCCG aims to have ongoing management and planning in the Zone Action Plans to ensure that action within the basin continues with strategic direction into the future. This can be achieved by building on existing management processes such as Adaptive Management, the decision support process which provides:

- A means of identifying critical information gaps.
- A planning mechanism that is dynamic, iterative and interactive.
- A process of priority setting and information evaluation.
- A mechanism to evaluate potential management options.
- A process to assess chosen management strategies.

An Adaptive Management model has already been developed within the basin as a component of the Blackwood Regional Initiative and the outcomes include:

- Identification that natural resource management is a socio-economic issue and technical solutions must address the socio-economic framework if they are to be effective.
- Understanding that scales of planning must be integrated.
- An understanding of the impacts of current agronomic practices.
- A decision support tool.
- A process to more effectively and efficiently manage information.
- A body of information which can be readily accessed by the community.

As the Zone Action Plans progress a growing store of information will need to be used to achieve best management for each zone. How this information is packaged, used and updated will be part of the Zone Action Plan. The Zone Working Groups will be able to build upon the strengths of the Adaptive Management project to evolve the Zone Action Plan by:

- Determining priority actions.
- Improving monitoring processes in the action plan.
- Prioritising best management actions.
- Providing relevant and accessible information and resources over time.
- Providing a base for long-term planning, management, monitoring and evaluation of the effectiveness of existing tools.

- Enabling those responsible for natural resource management to consider appropriate and viable management units.

5.4 Monitoring and Evaluation

The Importance of Monitoring and Evaluation

A **clearly defined and functional** monitoring and evaluation program is fundamental to meeting the BCCG's targets, objectives and outcomes. These activities can be grouped into five broad categories including strategic, project, environmental, financial and catchment activity (Table 3).

A new program is required to accommodate the changes in strategic direction of the BCCG and to provide a more **systematic approach** that:

- Measures the performance of projects against defined targets, objectives and outomes.
- Ensures monitoring and evaluation processes are incorporated into all projects.
- Defines the responsibilities for these activities at the six responsibility levels within the basin.
- Improves the transparency of decision-making.
- Establishes priorities for future research.
- Meets statutory obligations of external funding bodies.

It will be important to involve the community in collecting and interpreting relevant information so they build an understanding of the environmental, social and economic issues they confront which will provide motivation for individual and group activity. This motivation cannot be achieved through top-down government policy development and implementation.

Previous Activities

A draft program that meets the requirements set out above has been developed, based on the CIPP evaluation model, described by Horten (1993) as a conceptual framework for evaluation, named after its four component types of evaluation:
Context evaluation
Input evaluation
Process evaluation
Product evaluation

The purpose is to assist in **decision making** and to provide an ongoing **accountability** mechanism. The CIPP evaluation model has been used as the conceptual framework for development of monitoring and evaluation procedures for the BCCG; its application has allowed monitoring and evaluation requirements and appropriate information linkages to be developed for several purposes including the **State of Basin Program** and the **Community Monitoring Program**.

Priorities

The State of Basin Program will service the monitoring and evaluation requirements of decision-makers at two levels within the basin, the Zone Working Groups and the BCCG, and will produce the 'State of Basin' and 'State of Zone' reports.

The Community Monitoring Program will provide support to Landcare Coordinators for promoting local (farm) scale monitoring and evaluation activities at specific locations within the basin. This program aims to promote an ethos of monitoring and evaluation in the zones where Zone Action Plans are under development.

Table 3: Activity categories for monitoring and evaluation in the Blackwood Basin.

Activity	Outcomes to date
Strategic	Several processes have been initiated to evaluate the BCCG's performance and strategic direction, including regular consultations with primary stakeholders through public meetings and conferences, and committee reports tabled at BCCG monthly meetings. CSIRO provided an independent survey of community perceptions of the BCCG in 1997 through a series of interviews with landowners.
Project	Individual projects within the Regional Initiative are monitored on a three-monthly basis by a committee of key stakeholders and relevant project officers. Annual progress reports on achievements are forwarded to State and Federal funding bodies in accordance with statutory requirements.
Environmental	Key activities include the commercially sponsored Ribbons of Blue project and monitoring of key biophysical parameters such as water table height, saline land, waterlogged land and condition of remnant vegetation. Activities are conducted by various people including farmers, local government authorities, catchment groups and State Government Agencies. Biophysical, social and economic data sets have been assembled and analysed on a sophisticated GIS system as part of the Revegetation Strategy under the Regional Initiative.
Financial	A computer based accounting system has been employed to monitor and control the Group's financial activities. The current budget is approximately $500,000 per annum, with the total budget exceeding $3 million over the past three years. Detailed financial reports are tabled and scrutinised at BCCG monthly meetings. Accounts are managed on a project-by-project basis and are subject to annual audit.
Catchment Activity	The activities of various catchment and community groups within the basin have been analysed to evaluate the outcome of the Community Partnership project. This information is used for establishing priorities for future support in the form of coordinators and on-ground funding, and for the selection of focus catchments as part of the State Salinity Action Plan.

6 Cash Flow Projections

Blackwood Basin – Securing the Future

(Blackwood Regional Initiative Phase II)

Natural Heritage Trust 1998/99

Implementation Summary		Total Cost	% Total
Projects:	Zone Action Plan	$4,541,230	42%
	Remnant Vegetation Protection	$3,060,000	28%
	Community Start-up Incentive Scheme	$1,555,230	14%
	Protecting High Value Public Assets	$1,110,480	10%
	Dongolocking Lighthouse	$471,000	4%
		$10,737,940	100%

Project Group Summary

Year	Total Costs
1998/1999	$2,546,980
1999/2000	$3,577,980
2000/2001	$4,612,980
Total	**$10,737,940**

State Funds	Community	Other	NHT Funds	Totals
$21,000	$1,727,500	$30,000	$768,480	$2,546,980
$10,000	$2,374,500	$25,000	$1,168,480	$3,577,980
$10,000	$3,159,500	$25,000	$1,418,480	$4,612,980
$41,000	**$7,261,500**	**$80,000**	**$3,355,440**	**$10,737,940**
0%	68%	1%	31%	100%

Individual Project Summaries

Zone Action Plan

Year	Total Costs
1998/1999	$520,410
1999/2000	$1,460,410
2000/2001	$2,560,410
Total	**$4,541,230**

State Funds	Community	Other	NHT Funds	Totals
$0	$363,000	$0	$157,410	$520,410
$0	$1,003,000	$0	$457,410	$1,460,410
$0	$1,803,000	$0	$757,410	$2,560,410
$0	**$3,169,000**	**$0**	**$1,372,230**	**$4,541,230**

Remnant Vegetation Protection

Year	Total Costs
1998/1999	$1,020,000
1999/2000	$1,020,000
2000/2001	$1,020,000
Total	**$3,060,000**

State Funds	Community	Other	NHT Funds	Totals
$0	$720,000	$0	$300,000	$1,020,000
$0	$720,000	$0	$300,000	$1,020,000
$0	$720,000	$0	$300,000	$1,020,000
$0	**$2,160,000**	**$0**	**$900,000**	**$3,060,000**

Community Start-up Incentive Scheme

Year	Total Costs
1998/1999	$690,410
1999/2000	$517,410
2000/2001	$347,410
Total	**$1,555,230**

State Funds	Community	Other	NHT Funds	Totals
$0	$483,000	$0	$207,410	$690,410
$0	$360,000	$0	$157,410	$517,410
$0	$240,000	$0	$107,410	$347,410
$0	**$1,083,000**	**$0**	**$472,230**	**$1,555,230**

Protecting High Value Public Assets

Year	Total Costs
1998/1999	$200,160
1999/2000	$370,160
2000/2001	$540,160
Total	**$1,110,480**

State Funds	Community	Other	NHT Funds	Totals
$0	$121,500	$25,000	$53,660	$200,160
$0	$241,500	$25,000	$103,660	$370,160
$0	$361,500	$25,000	$153,660	$540,160
$0	**$724,500**	**$75,000**	**$310,980**	**$1,110,480**

Dongolocking Lighthouse

Year	Total Costs
1998/1999	$116,000
1999/2000	$210,000
2000/2001	$145,000
Total	**$471,000**

State Funds	Community	Other	NHT Funds	Totals
$21,000	$40,000	$5,000	$50,000	$116,000
$10,000	$50,000	$0	$150,000	$210,000
$10,000	$35,000	$0	$100,000	$145,000
$41,000	**$125,000**	**$5,000**	**$300,000**	**$471,000**

Blackwood Basin – Securing the Future

(Blackwood Regional Initiative Phase II)

Natural Heritage Trust 1998/99

Program Support Summary		**Total Cost**	**% Total**
Projects:	**Basin Coordination**	$1,942,670	34%
	Zone Coordination	$2,628,091	45%
	Information Management	$576,850	10%
	Monitoring and Evaluation	$630,862	11%
		$5,778,473	100%

Project Group Summary

Year	Total Costs
1998/1999	$1,402,931
1999/2000	$1,811,666
2000/2001	$2,563,876
Total	**$5,778,473**

State Funds	Community	Other	NHT Funds	Totals
$384,190	$388,799	$11,000	$618,942	$1,402,931
$588,277	$371,163	$6,000	$846,226	$1,811,666
$1,214,906	$385,463	$6,000	$957,507	$2,563,876
$2,187,373	**$1,145,425**	**$23,000**	**$2,422,675**	**$5,778,473**
38%	20%	0%	42%	100%

Individual Project Summaries

Basin Coordination

Year	Total Costs
1998/1999	$256,607
1999/2000	$645,794
2000/2001	$1,040,269
Total	**$1,942,670**

State Funds	Community	Other	NHT Funds	Totals
$131,817	$10,000	$0	$114,790	$256,607
$331,449	$10,000	$0	$304,345	$645,794
$630,000	$20,000	$0	$390,269	$1,040,269
$1,093,266	**$40,000**	**$0**	**$809,404**	**$1,942,670**

Zone Coordination

Year	Total Costs
1998/1999	$847,970
1999/2000	$854,860
2000/2001	$925,261
Total	**$2,628,091**

State Funds	Community	Other	NHT Funds	Totals
$178,873	$348,499	$5,000	$315,598	$847,970
$178,828	$322,763	$0	$353,269	$854,860
$267,406	$312,963	$0	$344,892	$925,261
$625,107	**$984,225**	**$5,000**	**$1,013,759**	**$2,628,091**

Information Management

Year	Total Costs
1998/1999	$115,950
1999/2000	$115,450
2000/2001	$345,450
Total	**$576,850**

State Funds	Community	Other	NHT Funds	Totals
$20,000	$0	$0	$95,950	$115,950
$20,000	$0	$0	$95,450	$115,450
$250,000	$0	$0	$95,450	$345,450
$290,000	**$0**	**$0**	**$286,850**	**$576,850**

Monitoring and Evaluation

Year	Total Costs
1998/1999	$182,404
1999/2000	$195,562
2000/2001	$252,896
Total	**$630,862**

State Funds	Community	Other	NHT Funds	Totals
$53,500	$30,300	$6,000	$92,604	$182,404
$58,000	$38,400	$6,000	$93,162	$195,562
$67,500	$52,500	$6,000	$126,896	$252,896
$179,000	**$121,200**	**$18,000**	**$312,662**	**$630,862**

7 Detailed Project Proposals

7.1 Strategic On-ground Delivery Program

7.1.1 Zone Action Plan Implementation Project

Main aims, activities and outcomes of project:
This project will implement Zone Action Plans to meet targets identified by each zone (consistent with basin targets, see Section 2). Having identified and prioritised local issues, stakeholders in each action zone will have determined appropriate on-ground activities to address key issues and will have established cost-sharing agreements to ensure achievement of zone targets and long term sustainability of the zone's natural resources with assistance from the Blackwood Catchment Coordinating Group.

Incentive payments will be made to landholders for implementing on-ground works that address key environmental issues. Levels of payment will be scaled according to the public benefit to be gained from the works, with activities with high public benefit receiving higher incentive payments per unit. The Blackwood Catchment Coordinating Group will work with each zone to define activities eligible for funding and to identify agreed outcomes for funding provided.

Implementation will be coordinated mainly by zone action committees. These local people will be best placed to coordinate on-ground activity as required and ensure on-going monitoring and evaluation. The Shire of Dumbleyung is offering administrative support for the accountability and distribution of implementation funds in their zone (the first zone action plan to be implemented).

Consistency and integration across zones will be coordinated by the BCCG through the Implementation Coordinator. This will ensure that each zone retains responsibility for effective implementation, while the BCCG provides the support and guidance needed to ensure efficient and accountable outcomes.

Location of on ground works:
On-ground works will make a staggered start within action zones in the Blackwood Basin - the Dumbleyung zone in 1998/99, two other zones in 1999/2000 and two more in 2000/01 (to be determined). The BCCG will continue beyond the life of the project to fulfill its target of conducting and implementing the Zone Action Plans in each of the nine zones.

Expected start date and expected finishing date:
October 1998 to September 2001.
Implementation will begin as each Zone Action Plan is completed and will continue indefinitely (until all targets are met).

Budget summary:

Year	Total costs	State funding	Proponent / local contributions	Other contributions	NHT funds sought
1998-99	$520,410		$363,000		$157,410
1999-2000	$1,460,410		$1,003,000		$457,410
2000-01	$2,560,410		$1,803,000		$757,410
Total	**$4,541,230**		**$3,169,000**		**$1,372,230**

Budget details for Zone Action Plan Implementation Project:

Cost item Oct 1998 to June 1999	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Operating					
On-ground works to meet zone targets	$510,000		$360,000		$150,000
Assessment, monitoring and evaluation panel costs	$5,250		$1,500		$3,750
Promotional and awareness material	$2,510				$2,510
Reporting on outcomes	$2,650		$1,500		$1,150
Totals	**$520,410**		**$363,000**		**$157,410**

Cost item July 1999 to June 2000	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Operating	$1,460,410		$1,003,000		$457,410
Totals	**$1,460,410**		**$1,003,000**		**$457,410**

Cost item July 2000 to June 2001	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Operating	$2,560,410		$1,803,000		$757,410
Totals	**$2,560,410**		**$1,803,000**		**$757,410**

7.1.2 Strategic Implementation for Remnant Vegetation Management

Main aims, activities and outcomes of project:

The BCCG has identified priority areas of remnant vegetation and this project will target on-ground action to protect these areas in a community managed (BCCG) strategic project. This project will run parallel to the Zone Action Plans and will enable action to continue in the remaining zones before they have a full Zone Action Plan in place. The resources for fencing and management of remnant vegetation will be directed by a system of ranking based on four criteria: size of remnant, area to boundary ratio, proximity to conservation reserves, and conservation value.

The cost of fencing all remnant vegetation within the basin has been valued at approximately $80 million. In each year of the project, two thirds of the funds will be allocated to fencing perimeters of remnant vegetation and one third will be allocated to a range of other management works including regeneration techniques, riparian management and erosion control. These integrated measures will ensure the sustainable management and protection of remnant vegetation.

The BCCG will call for formal expressions of interest directly from targeted landholders (through a priority remnant vegetation identification process). Based on the precedence set by the BCCG's Community Partnership Grants, the BCCG will enter into a formal agreement with landholders who agree to undertake management works.

Four major stakeholders will work in a partnership that recognises shared responsibilities in administering and implementing this project:

1. The BCCG will be responsible for the coordination of the project, the distribution and management of funds and project reporting.
2. Bushcare facilitators and support through Environment Australia will assist landholders with decision making, planning, information and on-ground support.
3. The Department of Environmental Protection will support and help to refine the project through the Revegetation Strategy Project (BCCG Regional Initiative).
4. Project activities will also be integrated with the proposed Conservation and Land Management rare flora conservation project to implement a rare flora draft management plan in the upper reaches of the Blackwood Basin (see Natural Heritage Trust Endangered Species Program application).

Location of on ground works:

Blackwood River Catchment Area

Expected start date and expected finishing date:

October 1998 to September 2001

Budget summary:

Year	Total costs	State funding	Proponent / local contributions	Other contributions	NHT funds sought
1998-99	$1,020,000		$720,000		$300,000
1999-2000	$1,020,000		$720,000		$300,000
2000-01	$1,020,000		$720,000		$300,000
Total	**$3,060,000**		**2,160,000**		**$900,000**

Budget details - Strategic Implementation for Remnant Vegetation Management:

Cost item Oct 1998 to June 1999	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Operating					
Funding for fencing and remnant vegetation management	$1,020,000	Bushcare Facilitator and Support (Environment Australia)	$720,000		$300,000
Totals	**$1,020,000**		**$720,000**		**$300,000**

Cost item July 1999 to June 2000	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Operating	$1,020,000	Bushcare Facilitator and Support (Environment Australia)	$720,000		$300,000
Totals	**$1,020,000**		**$720,000**		**$300,000**

Cost item July2000 to June2001	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Operating	$1,020,000	Bushcare Facilitator and Support (Environment Australia)	$720,000		$300,000
Totals	**$1,020,000**		**$720,000**		**$300,000**

7.1.3 Community Start-up Incentive Scheme

Main aims, activities and outcomes of project:

Funding will be directed to groups of landholders to implement planned on-ground landcare work to help meet Blackwood Basin targets (see targets in Section 2) and is designed to stimulate activity in areas outside the zones that will be active with a Zone Action Plan during the program's start-up period.

This funding will be available to parts of the Blackwood Basin where there has been limited or no landcare activity in organised groups. The Blackwood Strategic Revegetation Project (Blackwood Regional Initiative) has identified levels of activity in catchment groups across the Blackwood Basin (see Figure 7 Catchment Group Activity in Blackwood Zones). While most of the catchment groups in some zones are moderately to highly active, other zones have a majority of their area where landholders are not working together as a cohesive group.

This funding will stimulate group activity to encourage the formation and development of cohesive groups of landholders to address priority landcare issues. By providing a focus for group activity and enabling them to successfully complete a landcare project, they will gain confidence and cohesion. This will provide the basis for the group to undertake more ambitious activities as a Zone Action Plan for their region is developed and requires implementation.

This project will be managed by the BCCG (through the Implementation Coordinator), largely following the process developed in the Blackwood Community Partnership Grants. The existing Blackwood Assessment Panel will assess and prioritise project applications according to Blackwood Basin targets. Funding will be distributed to approved projects once a statutory declaration has been signed. Funding recipients will report on project outcomes and provide a financial statement for the project at its completion and the project will be evaluated at the project site by a BCCG representative.

Project outcomes will be reported annually to all stakeholders including the Natural Heritage Trust, BCCG, State Agencies, Land Conservation District Committees, environment/landcare groups and funding applicants.

Location of on ground works:

Blackwood River Catchment Area

Expected start date and expected finishing date:

October 1998 to September 2001

Budget summary:

Year	Total costs	State funding	Proponent / local contributions	Other contributions	NHT funds sought
1998-99	$690,410		$483,000		$207,410
1999-2000	$517,410		$360,000		$157,410
2000-01	$347,410		$240,000		$107,410
Total	**$1,555,230**		**$1,083,000**		**$472,230**

Budget details – Community Start-Up Incentive Scheme:

Cost item Oct 1998 to June 1999	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Operating					
On ground works to meet Basin targets	$680,000		$480,000		$200,000
Assessment, monitoring and evaluation panel costs	$5,250		$1,500		$3,750
Promotional and awareness material	$2,510				$2,510
Reporting on outcomes	$2,650		$1,500		$1,150
Totals	**$690,410**		**$483,000**		**$207,410**

Cost item July 1999 to June 2000	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Operating	$517,410		$360,000		$157,410
Totals	**$517,410**		**$360,000**		**$157,410**

Cost item July 2000 to June 2001	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Operating	$347,410		$240,000		$107,410
Totals	**$347,410**		**$240,000**		**$107,410**

7.1.4 Protecting High Value Public Assets

Main aims, activities and outcomes of project:

A number of large strategically important projects addressing priority issues will be funded each year. This funding will produce integrated activities on a catchment scale which will assist in preserving biodiversity, reducing recharge to ground water tables, sustainable management of riparian areas, maintaining and improving water quality, managing environmental weeds, and encouraging group development (see Basin targets in Section 2).

This is a vital component of the Blackwood Basin plan to meet the Basin targets set for the next three years. As some areas wait for the opportunity to develop and implement a zone action plan, there must be a way to ensure that everyone continues to work together to achieve land and nature conservation objectives for the Blackwood Basin.

Organised catchment groups which have a well developed catchment plan and identified objectives will be funded to protect high value public assets - environmental (eg wetlands), social (eg recreational areas) and economic (eg infrastructure). For example, funding will be directed to Rescue Towns identified in the State Salinity Action Plan to implement plans to address rising ground water tables (see the State Salinity Action Plan). This program is also receiving industry support from Solar Hart to protect the Australian Bush Heritage Block near Kojonup.

This funding will also be managed by the BCCG (through the Implementation Coordinator) in a process similar to the Community Start-up Incentive Scheme. Applications will be assessed by the same assessment panel on the one day - to minimise administrative costs. Projects funded will also be evaluated and reported on in a similar manner (see Community Start-up Incentive Scheme).

Location of on ground works:

Blackwood River Catchment Area

Expected start date and expected finishing date:

October 1998 to September 2001

Budget summary:

Year	Total costs	State funding	Proponent / local contributions	Other contributions	NHT funds sought
1998-99	**$200,160**		**$121,500**	**$25,000**	**$53,660**
1999-2000	**$370,160**		**$241,500**	**$25,000**	**$103,660**
2000-01	**$540,160**		**$361,500**	**$25,000**	**$153,660**
Total	**$1,110,480**		**$724,500**	**$75,000**	**$310,980**

Budget details – Protecting High Value Public Assets:

Cost item Oct 1998 to June 1999	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Operating					
On ground works to meet Basin targets	$195,000		$120,000	$25,000 (Solar Hart)	$50,000
Promotional and awareness material	$2,510				$2,510
Reporting on outcomes	$2,650		$1,500		$1,150
Totals	**$200,160**		**$121,500**	**$25,000**	**$53,660**

Cost item July 1999 to June 2000	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Operating	$370,160		$241,500	$25,000	$103,660
Totals	**$370,160**		**$241,500**	**$25,000**	**$103,660**

Cost item July 2000 to June 2001	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Operating	$540,160		$361,500	$25,000	$153,660
Totals	**$540,160**		**$361,500**	**$25,000**	**$153,660**

7.1.5 Dongolocking Revegetation Project

Main aims, activities and outcomes of project:

The Dongolocking case study area lies within the Shire of Dumbleyung. This area has provided a focal point for the management and protection of remnant vegetation on crown and private land. This project builds on previous work which has developed a framework for planning and devised landscape specifications for revegetation.

The main aims of this project are to integrate nature conservation with productive sustainable land use at local, landscape and regional scales, and to manage the remnant native vegetation and surrounding lands in Dongolocking so that existing native biota persists over the long term.

Remnant vegetation protection can be achieved in the Dongolocking area by:

- Working with farmers and other land managers to better protect existing remnant vegetation in situ through development of implementation plans etc.
- Communicating relevant information to farmers and other landholders through forums, media releases, field days, publications etc.
- Creating a medium through which stakeholders are willing to implement actions.
- Minimising the negative hydrological impacts on landholders down-stream.
- Ensuring funds are targeted strategically to on-ground actions.
- Increasing the size of individual remnants to enhance the viability of species - this includes linking of vegetation to create corridors.

Specific on ground outcomes of this project will be:

- Revegetation to increase the size of individual remnants to enhance the viability of local species, which in turn is predicted to enhance the viability of all species.
- Revegetation to improve the connection for re-colonisation between core remnants.
- Better protection of existing remnant vegetation.
- Improved profitability and sustainability of farming enterprises.
- Significantly less water and associated exports moving downstream either as groundwater or surface flow.
- Control target environmental weeds in the study area.

Location of on ground works:

Dongolocking catchment

Expected start date and expected finishing date:

October 1998 to September 2001

Budget summary:

Year	Total costs	State funding	Proponent / local contributions	Other contributions	NHT funds sought
1998 -99	$116,000	$21,000	$40,000	$5,000	$50,000
1999-2000	$210,000	$10,000	$50,000		$150,000
2000-01	$145,000	$10,000	$35,000		$100,000
Totals	**$471,000**	**$41,000**	**$125,000**	**$5,000**	**$300,000**

Budget details – Dongolocking Revegetation Project:

Cost item Oct 1998 to June 1999	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employment					
K Wallace R/Mgr CALM	$5,000	$5,000			
Dr. R Lambeck Research Scientist, CSIRO	$5,000			$5,000	
D Bicknell. AgWA	$5,000	$5,000			
B Bone, D/Mgr CALM	$5,000	$5,000			
In-kind / local labour contribution	$15,000		$15,000		
Operating					
Fencing	$34,000		$15,000		$15,000
Herbicide	$2,000	$1,000			$5,000
Seedlings	$20,000				$20,000
Establishment of seedlings	$15,000		$10,000		$5,000
Fox baiting	$10,000	$5,000			$5,000
Totals	**$116,000**	**$21,000**	**$40,000**	**$5,000**	**$50,000**

Cost item July 1999 to June 2000	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employment					
Operating					
Totals	**$210,000**	**$10,000**	**$50,000**		**$150,000**

Cost item July 2000 to June 2001	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Operating					
Capital					
Totals	**$145,000**	**$10,000**	**$35,000**		**$100,000**

7.2 Program Support Projects

7.2.1 Basin Coordination

Main aims, activities and outcomes of project:

This project aims to deliver a range of supporting mechanisms to ensure the successful and strategic delivery of the Strategic On-ground Delivery Programs outlined in Section 7.1.

- A Program Manager will be employed from January 1999 to manage projects efficiently and effectively through performance reporting, monitoring and evaluation, maintaining strong linkages across projects and other BCCG and agency programs and progress strategic development for biophysical, social and economic issues.

- An Implementation Coordinator will be employed from February 1999 to facilitate the delivery of four strategic on-ground delivery programs including the Zone Action Plan, Remnant Vegetation Management, Community Start-up Incentive Scheme and Protecting High Value Public Assets Projects to maximise on-ground funding delivery.

- Regional planning and implementation assistance for Bushcare in the catchment to achieve specified biodiversity goals will be facilitated through the Regional Bushcare Facilitator who will be based in Katanning and employed through Environment Australia.

- A contract position will implement the Communications Strategy (1998) to ensure strong public communication including the delivery of key messages through the media, the BCCG publication Blackwood News, industry associations, and personal presence from BCCG members and staff at regional and zone forums and agricultural and community shows.

- Strong executive support to the BCCG through competent financial management of project funds, preparation of meetings, correspondence, annual reports, audits and elections will be delivered through the existing BCCG Executive Officer who is funded through the lead agency, Agriculture WA.

- The Environmental Education Strategy (1997) will be implemented through a contract position to deliver priority tasks to help meet key targets including biodiversity and ground water balance within a three year period.

- To ensure the future of catchment management in the Blackwood a contract will be tendered to widen the field of investors by investigating and delivering realistic options for corporate and other sponsorship opportunities. Sponsorship packages for investment will be designed and prepared under this contract.

- A contract position in the first year to facilitate the preparation of a Blackwood Weeds Strategy and Action Plan with key stakeholders including local government will be followed by the employment of a Weeds Coordinator to implement the Weeds Strategy over the following two years.

Location of on-ground works:

Staff will be based in centres where they are best able to perform their duties. There are five Community Agricultural Centres in the Blackwood Catchment and over six landcare offices that currently provide office accommodation for landcare coordinators, BCCG and agency staff.

Expected start date and expected finishing date:

November 1998 to December 2001

Budget summary – Basin Coordination:

Year	Total costs	State funding	Proponent / local contributions	Other contributions	NHT funds sought
1998-99	$256,607	$131,817	$10,000		$114,790
1999-2000	$645,794	$331,449	$10,000		$304,345
2000-01	$1,040,269	$630,000	$20,000		$390,269
Total	**$1,942,670**	**$1,093,266**	**$40,000**		**$809,404**

Budget details – Basin Coordination:

Cost item Oct 1998 to June 1999	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employees and consultants	+Oncosts @ 17.5%				
Program Manager (6 months)	$30,203				$30,203
Implementation Coordinator (5 months)	$17,637				$17,637
Executive Officer funded by AGWA	$20,000	$20,000			
CALM personnel Wheatbelt Region and District X2	$19,884	$19,884			
Water and Rivers Commission Richard Pickett Damien Hills	$17,985	$17,985			
Department of Environmental Protection - John Sutton	$11,585	$11,585			
Regional Bushcare Facilitator	Provided jointly by EA and CALM				
Communications Education Sponsorship Contracts	$24,783				$24,783
Weeds Strategy Development Contract	$10,000				$10,000
Operating					
Vehicles X3 and Operating	$8,750 $2,917				$8,750 $2,917
Printing / Copying	$10,000				$10,000
Travel 50 days @ $100 / day	$5,000				$5,000
Telephone - X3 - Office and Mobile	$5,500				$5,500
On-costs for DEP, WRC and CALM staff	$12,363	$12,363			
BCCG Operating funded by AGWA	$40,000	$40,000			
AGWA - Shire Office Accommodation CAC - Boyup	$20,000	$10,000	$10,000		
Totals	**$256,607**	**$131,817**	**$10,000**		**$114,790**

Cost item Oct 1999 to Sept 2000	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employees and consultants	$528,294	$281,449			$246,845
Operating	$117,500	$50,000	$10,000		$57,500
Totals	**$645,794**	**$331,449**	**$10,000**		**$304,345**

Cost item Oct 2000 to Sept 2001	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employees and consultants	$856,869	$450,000			$316,869
Operating	$183,400	$90,000	$20,000		$73,400
Totals	**$1,040,269**	**$630,000**	**$20,000**		**$390,269**

7.2.2 Zone Coordination

Main aims, activities and outcomes of project:

This project will deliver critical landcare and technical support at the zone and catchment level. This project will ensure full community participation, Zone Action Plan development and implementation, and technical support and extension of focus catchment planning to zones.

The activities of Community Landcare Coordinators range from group building and development, coordination of implementing farm plans and specific projects, to managing entire zones and the activities therein. The specific outcomes are as follows:

- Community profiles developed
- New sub-catchments or issue based groups developed
- Delivery of community education
- Promotion of the zone and Land Conservation District Committee, issues, vision and objectives
- Integrated property management plans and catchment and zone action plans
- External technical advice on best management practices and support for groups provided
- Sub-catchment implementation and project development
- Monitoring and evaluation program set up and coordinated with the basin program
- External funds, including local government and private sponsorship secured
- Community participation program developed
- Facilitation and coordination of the development of zone action plans
- Facilitation and coordination of the implementation of zone action plans.

The following Community Landcare Coordinators are part of this proposal. There will be detailed applications submitted outside this proposal from the shires of Kent (through the Swan Avon Initiative), Kojonup and Boyup Brook.

- Dumbleyung Zone Manager
- Kent Implementation Officer
- Kojonup Project Manager
- Boyup Brook Group Coordinator.

An Extension Officer will be employed in the first year to undertake the necessary action plan development in the Dumbleyung Zone. There will be another Extension Officer employed in the second year who will undertake parallel tasks as an additional two zones are selected each year. These officers will work closely for intensive periods with community members, the Focus Catchment Support Team and the respective Community Landcare Coordinator(s) in each zone. Under the guidance of the Blackwood Catchment

Coordinating Group and the local zone action committee these people will be responsible for the preparation of zone targets, cost benefit analyses and zone action plans.

Fundamental to the development and implementation of quality catchment and zone action plans is the need to collect and extend information regarding the consequences of best management practices on ground water levels. The Ground Water Modelling for Groups project (current Regional Initiative) is providing expert advice to landholders on ground water impacts of differing landuse practices. The extension of this successful project will evaluate and refine catchment water management plans prepared by the Focus Catchment Support Teams which will be extended to the surrounding zone via an extension officer.

Support for both the Community Landcare Coordinators and Extension Officers will be through an Environment Australia contract for Bushcare support to provide advice on remnant vegetation management and revegetation to ensure biodiversity targets are met.

Farm forestry networking needs have been identified in the middle and lower parts of the Blackwood Catchment where adequate rainfall provides for high value commercial timber opportunities. As part of this proposal the existing network of tree growers in the lower four zones will be strengthened through the part time employment of a network coordinator who will organise continuing education and skills training opportunities and field trips to expand the number of tree growers for carbon sequestration, high water using vegetation and commercial ventures.

In addition to the specific activities of Community Landcare and Bushcare Coordinators and Extension Officers , there is provision in this proposal for community development and skills training for these people, community members and local government. In support of the demand for stronger Blackwood Basin communication links, better access to training and resources and the need to integrate zone implementation activities to zone and basin targets the following outcomes will be achieved:

- Induction Kit for Blackwood coordinators and extension workers
- Training packages prepared for coordinators, community volunteers and local government
- Programs developed for integrated community participation
- Strong network of Bushcare and landcare practitioners.

Location of on-ground works:

Coordinators and technical support staff will be based where they are best able to perform their duties. There are five Community Agricultural Centres in the Blackwood Catchment and over six landcare offices.

Expected start date and expected finishing date:

November 1998 to December 2001

Budget summary:

Year	Total costs	State funding	Proponent / local contributions	Other contributions	NHT funds sought
1998 -99	$847,970	$178,873	$348,499	$5,000	$315,598
1999-2000	$854,860	$178,828	$322,763		$353,269
2000-01	$925,261	$267,406	$312,963		$344,892
Totals	**$2,628,091**	**$625,107**	**$984,225**	**$5,000**	**$1,013,759**

Budget details – Zone Coordination:

Cost item Oct 1998 to June 1999	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employment					
Dumbleyung Zone Manager	$89,500		$36,000		$53,500
Boyup Brook Group Coordinator	$22,045		$8,980		$13,065
Kent Shire Implementation Officer	$21,332				$21,332
Kojonup Project Manager	$47,250		$18,750		$28,500
Coordinator Networks and Resourcing	$5,000			$5,000	
Extension Officers	$100,187		$40,000		$60,187
Focus Catchment Water Management	$119,048	$55,219			$63,829
Blackwood Farm Forestry Community Development	$16,400	$10,000	$6,400		
Operating					
Dumbleyung Zone Manager	$51,900		$51,900		
Boyup Brook Group Coordinator	$7,595		$5,840		$1,755
Kent Shire Implementation Officer	$155,519		$153,969		$1,550
Kojonup Project Manager	$9,810		$9,810		
Coordinator Networks and Resourcing	$25,000				$25,000
Extension Officers	$57,000	$35,000	$10,000		$12,000
Focus Catchment Water Management	$80,784	$68,654			$12,130
Blackwood Farm Forestry Community Development	$2,350		$2,350		
Capital					
Kent Shire Coordinator (Implementation Officer)	$4,500		$4,500		
Extension Officers	$14,000	$10,000			$4,000
Blackwood Farm Forestry Community Development	$18,750				$18,750
Total	**$847,970**	**$178,873**	**$348,499**	**$5,000**	**$315,598**

Cost item July 1999 to June 2000	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employment	$456,182	$57,428	$99,650		$299,104
Operating	$398,678	$121,400	$223,113		$54,165
Capital					
Totals	**$854,860**	**$178,828**	**$322,763**		**$353,269**

Cost item July 2000 to Dec 2001	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employment	$435,297	$99,725	$69,350		$266,222
Operating	$484,964	$162,681	$243,613		$78,670
Capital	$5,000	$5,000			
Totals	**$925,261**	**$267,406**	**$312,963**		**$344,892**

7.2.3 Information Management

Main aims, activities and outcomes of project:

Information management in the Blackwood Basin and each action zone will be enhanced through a number of initiatives:

- The Blackwood Adaptive Management model will be refined to support the Zone Action Plan process and help refine targets within each zone.
- A strategy will be developed to ensure relevant data is continually collected, analysed, updated and implemented within the Zone Action Plan and to facilitate the adoption of best management practices.
- Information will be extended to community groups and other stakeholders through reports, forums, workshops and conferences to ensure widespread stakeholder contribution to and dissemination of information.
- Best management practice options will be evaluated against current management practices. This process will help clarify exactly what our current systems are achieving and will assist in determining what management options we may need to close the gap between what is being achieved and the targets we want to achieve.

Equal access to information is essential to meeting the Blackwood Basin targets. To facilitate effective and efficient information extension, an education and inquiry system will be established at Dumbleyung and Boyup Brook as Dumbleyung is to be the first Zone Action Plan developed and Boyup Brook provides some of these functions already. Computer infrastructure and software will be upgraded to enable compilation, analysis and presentation of natural resource information for local people. Agriculture WA will guide this process and manage it to integrate with other State systems.

Systems will be extended to Community Landcare centres as other Zone Action Plans are developed. Community members will have access to decision support tools, information on the local and Blackwood Basin environment, and the assistance of staff proficient in the use of these tools and interpretation of resources.

Location of on ground works:

Blackwood River Catchment Area

Expected start date and expected finishing date:

October 1999 to September 2001

Budget summary:

Year	Total costs	State funding	Proponent / local contributions	Other contributions	NHT funds sought
1998-99	$100,450	$20,000			$80,450
1999-2000	$100,450	$20,000			$80,450
2000-01	$300,450	$220,000			$80,450
Total	**$501,350**	**$260,000**			**$241,350**

Budget details – Information Management:

Cost item Oct 1998 to June 1999	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employment					
Data compilation	$26,250				$26,250
Agriculture WA SRD					
Basin/zone coordinator training	$20,000	$20,000			
Capital					
Upgrade computer infrastructure	$10,000				$10,000
GEOMEDIA software	$9,200				$9,200
VISUAL BASIC software	$35,500				$35,000
Totals	**$100,450**	**$20,000**			**$80,450**

Cost item July 1999 to June 2000	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employment	$46,250	$20,000			$26,250
Capital	$54,200				$54,200
Totals	**$100,450**	**$20,000**			**$80,450**

Cost item July 2000 to June 2001	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employment	$246,250	$220,000			$26,250
Capital	$54,200				$54,200
Totals	**$300,450**	**$220,000**			**$80,450**

7.2.4 Monitoring and Evaluation

Main aims, activities and outcomes of project:

The aims of this project are threefold, firstly to provide tools and data for monitoring and evaluation at the basin and zone levels (Basin and Zone Monitoring Program), secondly to provide infrastructure and operational support to Community Landcare Coordinators for monitoring and evaluation activities (Community Monitoring Program), and thirdly to monitor this proposed NHT investment to achieve stated outcomes.

Basin/Zone Program

Activities in this program will fulfil the requirements for accountability and transparency of investment by the community and funding bodies. The program is split into two components:

1 Basin

A 'State of Basin' report will be produced that evaluates biophysical, social and economic information. This report will be conducted annually and will be widely distributed in the Blackwood Basin. Relevant sections will be incorporated in the Western Australian State of Environment report. This situation statement will provide a benchmark for:

- assessing progress towards achieving the objectives of the BCCG,
- refining the biophysical, social and economic targets established by the BCCG,
- identifying information needs, research and funding priorities, and
- judging the success of the new planning and implementation framework through changes in community attitudes and behaviour.

2 Zone

A 'State of Zone' report will be produced for each of the nine zones as they are initiated. These reports will contain detailed information on key parameters and serve as a benchmark for the development of the Zone Action Plans. The 'State of Zone' report will also be conducted annually and the results will be forwarded to the BCCG for incorporation into the 'State of Basin' report.

Self Monitoring Program

The self monitoring program will provide infrastructure and operational support to Landcare Coordinators for promoting local (farm) scale monitoring and evaluation activities at specific locations within the basin. Further development of the Monitoring and Evaluation project will be undertaken on contract. A Monitoring and Evaluation Coordinator will be employed to coordinate and facilitate all activities within this project. Surface water quality monitoring including the successful 'Snapshot' continues to be managed by the Bunnings Watercare Program, with data from all water sampling in the Blackwood Basin being incorporated into a Watercare database for use by Landcare Coordinators and community members.

The Community Monitoring Program aims to promote an ethos of monitoring and evaluation in the zones where zone action plans are under development. The objective is to educate individual land managers and catchment groups on the need for monitoring on their own land and to utilise the information in the catchment and property management planning processes.

Location of on ground works:

Blackwood River Catchment Area

Expected start date and expected finishing date:

October 1999 to September 2001

Monitoring Initiative

A range of integrated monitoring and evaluation activities will be employed to assess the performance of the Securing the Future investment package in meeting the Blackwood community's defined outcomes and targets. Each program will incorporate clearly defined objectives, quantified targets (where possible), performance indicators and success criteria.

Performance audits will be conducted at six-monthly intervals on all programs by a standing committee of the BCCG and the results transmitted to relevant funding bodies.

Details of the Monitoring and Evaluation program will be finalised by June 1998.

Budget summary:

Year	Total costs	State funding	Proponent / local contributions	Other contributions	NHT funds sought
1998-99	$182,404	$53,500	$30,300	$6,000	$92,604
1999-2000	$195,562	$58,000	$38,400	$6,000	$93,162
2000-01	$193,008	$58,000	$38,400	$6,000	$102,608
2001-02	$47,888	$9,500	$14,100		$24,288
Total	**$618,862**	**$179,000**	**$121,200**	**$18,000**	**$312,662**

Budget details – Monitoring and Evaluation:

Cost item Oct 1998 to June 1999	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employment					
Plus On costs @ 17.5%					
Monitoring and Evaluation coordinator (5 months)	$22,354				$22,354
Agriculture WA 20%	$6,000	$6,000			
Water & Rivers Commission 20%	$15,000	$15,000			
Monitoring and Evaluation Program development contract	$20,000				$20,000
Operating					
Coordinator vehicle	$5,250				$5,250
Community Attitudes Survey	$20,000				$20,000
Water and Rivers Commission gauging stations	$25,000	$25,000			
Piezometer monitoring 360 / mth @ $15 /hr	$24,300		$24,300		
Blackwood Snapshot - community surface water monitoring	$12,000		$6,000		$6,000
Watercare database development and maintenance	$6,000				$6,000
Bunnings Treefarms	$6,000			$6,000	
Office support AgWA	$7,500	$7,500			
Capital					
1 x EM38	$13,000				$13,000
Totals	**$182,404**	**$53,500**	**$30,300**	**$6,000**	**$92,604**

Cost item July 1999 to June 2000	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employment	$89,162	$28,000			$61,162
Operating	$93,400	$30,000	$38,400	$6,000	$19,000
Capital	$13,000				$13,000
Totals	**$195,562**	**$58,000**	**$38,400**	**$6,000**	**$93,162**

Cost item July 2000 to June 2001	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employment	$91,608	$28,000			$63,608
Operating	$113,400	$30,000	$38,400	$6,000	$39,000
Capital					
Totals	**$193,008**	**$58,000**	**$38,400**	**$6,000**	**$102,608**

Cost item July 2001 to Sept 2001	Total costs	State funding	Proponent/local contributions	Other contributions	NHT funds sought
Employment	$23,538	$7,000			$16,538
Operating	$24,350	$2,500	$14,100		$7,750
Capital					
Totals	**$47,888**	**$9,500**	**$14,100**		**$24,288**

9 Six Levels of Planning in the Blackwood Basin

The following outline of each level of planning contains the profile of the geographical area, the summary of the tasks to be addressed and progress to date on accomplishing these tasks.

Regional Planning

Profile

The South West Region consists of the major basins of Swan-Canning, Peel-Harvey, Leschenault, Geographe, Cape to Cape, Blackwood and the Warren Catchments and covers an area of approximately 23 million hectares supporting 80% of the population of Western Australia.

Key responsibilities to be addressed in Regional plan
Identify broad regional objectives and provide information on: • Regional Development - infrastructure requirements, commercial and industrial expansion; • Natural Resource Management - biodiversity, dryland salinity, water quality; • Statutory Planning - Local government planning schemes, waste management; • Social Issues - employment, education.
Point out consistencies with Federal and State policy including the State Salinity Action Plan, Biodiversity Convention, National Forest Policy Statement, National Weeds Strategy and the Natural Heritage Trust.
Guide the preparation of plans at the river basin scale to ensure activities within the region are relevant and consistent within the regional context.
Review feedback from the outcomes of basin activities to refine Regional plans.

Progress to date

A draft 'Regional Strategy and Action Plan for the South West (WA): Framework' was prepared in June 1997 and further development is underway to define goals and objectives for the region.

Basin Planning

Profile

The Blackwood river basin is the largest catchment area in the south-west area covering 2.2m hectares. It contains over 35,000 people, approximately 150 catchment groups, 17 Land Conservation District Committees and 19 Local Government Authorities.

Key responsibilities to be addressed in Basin Plan
Address a wide range of issues including ground and surface water management, fisheries, wetlands protection, drainage, remnant vegetation, commercial forestry, nature conservation and biodiversity.
Set objectives and targets for key biophysical, social and economic parameters.
Develop strategies and policy on a range of issues, with participation of community and BCCG representatives.
Suggest recommendations for future studies.
Define responsibilities for undertaking research and identified activities.

Basin plan cont.

Develop monitoring programs to measure progress towards meeting the basin plan objectives and review the process for adjusting the planning process to reflect the identified limitations or success.
Determine the operational life of the plan.
Define roles and responsibilities of key stakeholders for implementation, including government agencies.
Identify the major zones within the Blackwood Catchment where more detailed plans will be developed, and set broad objectives for each individual zone to ensure that the planning and activities within the zones are consistent with the stated objectives and targets of the basin and the region.
Review feedback from the outcome of zone and basin activities, for potential modification of basin plans and objectives of the South West Region.

Progress to date

The development of components of the basin plan is at an advanced stage as a result of previous activities and the outcomes of strategic and technical projects of the Regional Initiative. Key information required for decision-making on biophysical and demographic issues has been captured and integrated on a dedicated GIS system for interrogation.

Targets for specific parameters of biophysical, social and economic characteristics have been quantified earlier in this document. These targets will be modified over time as the completion of technical and scientific work currently underway, and feedback is received from zone and catchment groups on progress with on-ground activities.

Zone Planning

Profile

There are nine zones in the Blackwood Basin, the proposed names based on the major river systems are: Hillman, Arthur, Dumbleyung, Coblinine, Beaufort, Upper Blackwood, Middle Blackwood, Nannup and Lower Blackwood.

Key responsibilities to be addressed in Zone Plan
Each plan will produce a Situation Statement that provides information on biophysical, social and economic issues; their impacts; and inter-relationships.
Evaluate all possible options to address the issues according to: • technical feasibility • community acceptance • barriers to adoption (eg time constraints, lack of information, lack of necessary equipment) • social, environmental and economic costs and benefits.
Recommend priority activities and locations: • efficiency of the activity to achieve target • economics of activity • urgency for action in the total landscape • opportunity for use of activity.
Identify the roles and responsibilities of stakeholders (who will pay, and who will carry out the work).
Work out the cost-sharing arrangements (the percentage of private and public contribution).
Describe the incentive scheme for implementation.
Consult with community and government.
Monitor and evaluate plan using performance indicators and a framework for evaluation.
Review feedback from catchment and local activities and recommend changes to Basin plans.

Progress to date

Development of ZAPs was initiated in Zone 7 (Dumbleyung) in 1997. Work is underway to identify priority actions and critical areas in this zone, which will be followed by a benefit-cost analysis of options to define cost-sharing arrangements.

Catchment Planning

Profile

Many social catchment groups are active across the basin. Each group typically contains 100 individuals, including land managers, members of conservation groups and local government councillors. There may be as many as 20 groups clustered within a zone.

Key responsibilities to be addressed in Catchment Plan
Refine pre-existing catchment plans to ensure plans are consistent and compatible with the recommendations of the Zone Action Plan.
Prepare coordinated bids for funding via the Zone Action Plan for activities in the catchment (eg linking and protecting remnant vegetation, protection of stream banks and revegetation of local areas).
Organise the individuals of the catchment group to carry out on-ground works.
Disseminating information from the Zone Action Plan to members of the catchment group.
Provide feedback of the outcomes of activities at the catchment level to the Zone Action Committee.

Progress to date

Catchment support teams under the State Salinity Action Plan have been formed by government agencies to provide specific advice within the focus catchment. Teams consist of landcare officers based in regional centres with expertise in hydrology, vegetation, economic analysis and group facilitation. Teams will work with individual catchment groups for a period of time up to 12 months.

Several catchments have already been nominated across the basin under the Salinity Action Plan, including Fence Road, Byenup Hill, Lower Balgarup and Lake Toolibin. Additional focus catchments have been selected by the BCCG and include Boree Gully and Date Creek. Addition catchments will be selected over the next three years.

Local Planning

Profile

The local scale incorporates a variety of public and private enterprises, such as farms, town sites and nature reserves.

Key responsibilities to be addressed in Local Plans
Present the specific designs for: • Best Management Practices such as for fertiliser use, tillage and cropping systems, and farm forestry, • protection and enhancement of remnant vegetation, and • restoration of natural vegetation.
Prepare submissions for Individual Work Proposals for the Zone Action Plan.

Local Plans cont.

Identify the need for specific environmental assessments (Environmental Impact Assessment), such as for the design of drainage activities.
Demonstrate compatibility with recommendations of the Zone Action Plan and State Salinity Action Plan focus catchments.
Guide planning and implementation at the Site level.

Progress to date

Property management plans have been undertaken in many enterprises, for example there are more than 200 property plans in the upper catchment. Most of these plans have included activities to address land and water degradation and local government authorities are becoming more involved in land and water management.

Site Planning

Profile

The site scale incorporates small parcels of land of less than 50 hectares that may be part of larger areas of public or private property, for example farm paddocks, recreational parks and blocks within nature reserves.

Key responsibilities to be addressed in Site Plan
Formulate and execute specific details of on-ground activities, in accordance with the Individual Work Proposal within the Zone Action Plan.
Demonstrate compatibility with Zone Action Plans.
Maintain works completed under Zone Action Plans.
Provide feedback from outcomes of activities to the catchment group, Zone Action Committee and the BCCG.

9 Matrix of Investment Versus Targets in the Blackwood Basin

Blackwood Basin Targets / **NHT Proposal**	Ground water management	Biodiversity preservation and restoration	Riparian management	Water quality improvement	Environmental weed management	Group development, coordination and communication
Strategic On-Ground Delivery						
Zone Action Plan Implementation						
Strategic Implementation for Remnant Vegetation						
Community Start-up Incentive Scheme						
Protecting High Value Public Assets						
Program Support						
Basin Coordination						
Zone Coordination						
Information Management						
Monitoring and Evaluation						
Dongolocking Lighthouse						

10 Timeframe for developing Zone Action Plans