Outback to the Ocean Performance Story Report

A study of seven projects within the South Australian Murray-Darling Basin Natural Resource Management region and how they have contributed to biodiversity, sustainable farm practice and community engagement outcomes

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Front cover image: Regent Parrot (image provided by Ben Kaethner)

Executive summary

This project evaluated the contribution of two sustainable farm practice projects and five biodiversity conservation projects in the South Australian Murray-Darling Basin NRM region to national biodiversity, sustainable farm practice and community engagement targets. The Australian Government has undertaken this "participatory performance story report" evaluation in partnership with the South Australian Murray-Darling Basin (SAMDB) NRM Board and the South Australian Government. The projects included in the performance story report are:

- Sustainable farm practice projects:
 - Drought lots
 - Whole farm planning
- Biodiversity conservation projects:
 - Bush Management Advisors
 - BushBids (Biodiversity Stewardship)
 - Threatened mallee birds recovery project
 - Regent Parrot recovery project
 - Threatened flora recovery project

The aims of the projects are:

- Whole Farm Planning program: to identify land management priorities and introduce the changes required to encourage the sustainable management of farm resources through consideration of the economic, social and environmental needs of a farming business.
- *Drought Lot program:* to assist producers to preserve existing ground cover and minimise soil disturbance and erosion by removing stock from paddocks and so prevent land degradation during and after drought conditions.
- Bush Management Advisor program: to assist in the protection and management of native vegetation and biodiversity through provision of information and support
- BushBids (Biodiversity Stewardship): to protect and enhance the biodiversity values of the Eastern Mount Lofty Ranges by establishing long-term protection and management through conservation agreements with private land managers.
- Threatened species recovery programs: to investigate, plan and implement management for threatened fauna and flora.

The evidence collected for this evaluation came from interviews with participating land managers, Project Officers and scientists, as well as published reports and unpublished information provided by the projects. Program logic models were developed for the biodiversity and sustainable farm practice projects to document the hierarchy of activities, outputs and outcomes (Caring for our Country targets, and regional and state NRM targets). The logic model was used as a framework against which evidence of progress and achievement was collected and evaluated. Many land managers, Project Officers and natural resource management professionals also contributed to the evaluation by participating in the identification of achievements and issues, and by formulating recommendations for future programs.

The evaluated programs have contributed to nine Caring for Our Country targets and nine state and regional targets. The Caring for our Country targets relate to increasing landscape scale conservation, improving knowledge and skills of land managers and community, increasing volunteer participation, engaging indigenous communities, increasing native habitat, reducing the impact of rabbits and weeds of national significance (WONS) and increasing the extent of the National Reserve System. The regional resource condition and State NRM targets examined in this study relate to the condition, extent and protection of native vegetation, and the degradation and condition of the land. The following points summarise the contribution of the programs to improving resource condition.

- The whole farm planning and drought lot projects are likely to have decreased degradation pressures on a small proportion of properties and to have contributed to improvement in land condition at the local scale by providing the tools and mechanisms for individuals to improve land management practices. The outcomes for Drought Lots are quality assured and are likely to have improved land condition, including a reduction in soil erosion risk for vulnerable soil types under native vegetation.
- The biodiversity conservation projects have contributed to improvement in native vegetation condition, localised to the district scale.
- There has been little increase in extent of native vegetation as a direct outcome of the biodiversity conservation projects evaluated (the projects evaluated did not have the increase in extent of native vegetation as a primary aim).
- The biodiversity conservation projects have made a significant contribution to the understanding of
 threatened species distribution and threats. Improved vegetation management practices implemented
 by the programs—particularly fire management—have reduced the risk that threatened mallee bird
 species will be lost through catastrophic events such as fire. Vegetation management undertaken
 through the Threatened Flora Project, including weed control, reduction in total grazing pressure and
 strategic burning have improved the viability of some threatened plant populations.

Although absolute improvement in the condition of targeted natural resources has not been observed, the projects have made an important contribution to slowing the rate of decline in resource condition which is a significant achievement.



Figure 1. A BushBids site in the Eastern Mount Lofty Ranges (image provided by Patrick O'Connor)

Abbreviations

BACI: Before After Control Impact

BEM: Black-eared Miner

BMA: Bush Management Advisor
BMP: Best Management Practice

CARE team: Community Action in the Rural Environment

CARRS: Comprehensive, Adequate and Representative Reserve System

CFS: Country Fire Service

DEH: Department for Environment and Heritage

DL: Drought Lots

DWLBC: Department of Water, Land and Biodiversity Conservation

EMLR: Eastern Mount Lofty Ranges

HA: Heritage Agreement (SA Conservation Covenant)

ID: identification

IPA: Indigenous Partnership Agreement

IUCN: International Union for the Conservation of Nature

LAP: Local Action Planning Group

MEW: Mallee Emu-wren

MMCN: Murray Mallee Community Network

MMLAP: Murray Mallee Local Action Planning Group

MSC: Most-significant change

NAP: National Action Plan for Salinity and Water Quality

NGO: Non-government organisation

NHT: Natural Heritage Trust

NRM: Natural Resources Management

NRS: National Reserve System

RP: Regent Parrot

SAMDB NRM Board: South Australian Murray-Darling Basin Natural Resource Management Board

SASP: South Australian Strategic Plan 2007

TMB: Threatened Mallee Birds

TSN: Threatened Species Network
WCF: Wildlife Conservation Fund

WFP: Whole Farm Planning

WONS: Weeds of National Significance

WUE: Water use efficiency
WWB: Western Whipbird

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Section 1: Context

Introduction

The aim of this study was to evaluate the extent to which Australian Government investment contributed to improving biodiversity, sustainable farm practice and community engagement outcomes in the South Australian Murray-Darling Basin Natural Resources Management (SAMDB NRM) region from 2004 to 2009. Seven biodiversity and sustainable farm practice projects were selected for this evaluation. They were the Whole Farm Planning, and Drought Lots programs and the Bush Management Advisor, BushBids Biodiversity Stewardship, Threatened Mallee Birds, Regent Parrot and Threatened Flora programs.

All of these programs, with the exception of BushBids, were funded by the Natural Heritage Trust (NHT) or the National Action Plan for Salinity and Water Quality (NAP) and Caring for our Country investment programs, through the SAMDB NRM Board. The BushBids program was funded through the Australian Government's Maintaining Australia's Biodiversity Hotspots program.

Background to the projects

Sustainable farm practice projects

Drought Lots program

The Drought Lots program was initiated in 2007 and aims to assist primary producers to preserve existing ground cover and minimise soil disturbance and erosion during and after drought conditions. Fixed rate incentives are offered to land managers to establish the necessary infrastructure and contain key breeding stock in a small area, thereby resting the remainder of the property from grazing. Land managers are contracted to deliver the soil protection services (drought lots) and attend training workshops for knowledge and skill development for drought lot management. Payment is only made after an inspection of the completed drought lot infrastructure. The Drought Lots program has been open to land managers throughout the entire SAMDB NRM region.



Figure 2. A drought lot site (photo provided by Anne Morgan)

Whole Farm Planning (WFP) program

The WFP program aims to identify land management priorities and introduce the changes required to encourage sustainable management of farm resources. This is done with consideration for the economic, social and environmental needs of farming businesses. A key activity is to work with land managers to develop whole farm plans through facilitated workshops. The workshops are developed in consultation with the land managers and target identified land management priorities and information gaps. Delivery of the program was originally contracted to external consultants and community organisations; however, since 2007 the program has been managed by the SAMDB NRM Board. The program has targeted a number of districts within the region; however land managers interviewed for this study were from the Eudunda Whole Farm Planning group.

Biodiversity projects

Bush Management Advisor (BMA) program

The BMA provides support and advice to land managers and the community for remnant vegetation management and restoration, and biodiversity conservation. This is done through the development of practical management plans to address key threats, provision of information and assistance for establishing permanent conservation covenants (Heritage Agreements), and linking land managers into information and incentive programs to assist them to manage remnant vegetation. During the period evaluated, one full time BMA was active to the region, and two other BMAs shared their time between the SAMDB and neighbouring NRM regions (South East and Adelaide and Mt Lofty Ranges).

BushBids Biodiversity Stewardship program

The BushBids biodiversity stewardship project secured the protection and management of more than 2,200 ha of remnant native vegetation in the Eastern Mount Lofty Ranges by establishing long-term conservation management agreements with private land managers. A single price, sealed bid tender was used to allocate incentive funds to the most cost effective conservation management services offered by land managers. Management services include weed and pest animal management, grazing exclusion or strategic grazing, retention of fallen logs and litter and permanent conservation covenants.

Threatened Mallee Birds (TMB) program

The TMB project focuses on five bird species in the SAMDB region: Mallee Emu-wren, Striated Grasswren, Western Whipbird, Red-lored Whistler and Malleefowl. Research was undertaken to improve information regarding the distribution of these threatened mallee birds, their habitat requirements and threats. Recovery plans were prepared for four threatened bird species. Where possible, threats such as predation, grazing, inappropriate fire regimes and habitat fragmentation are being addressed. Information and technical support has been provided to public and private land managers.

Regent Parrot Recovery project

The Regent Parrot recovery project aimed to prevent the long term decline in this species as well as address broader conservation issues along the River Murray. Research was undertaken to improve understanding of the Regent Parrot's distribution, ecology and threats. On-ground action was taken to protect and restore habitat. The project has also focussed on communication to raise community awareness of the Regent Parrot threatened status and actions for recovery. This project is focussed on the River Murray corridor.

Threatened Flora Recovery program

The Threatened Flora program commenced in 2005 and focuses on the recovery of nine nationally threatened plant species. Research was undertaken to improve knowledge of the distribution, ecology, habitat requirements and threats, and a recovery plan for all nine species was produced. The recovery efforts include weed and pest animal management, grazing exclusion and management and improving land management practices (e.g. roadside vegetation management). This project focussed on threatened plant species in the south eastern Mt Lofty Ranges, the area surrounding the Lower Lakes and Ngarkat Conservation Park.

Figure 3 provides a map showing the location of the SAMDB NRM region and priority areas for biodiversity conservation investment.

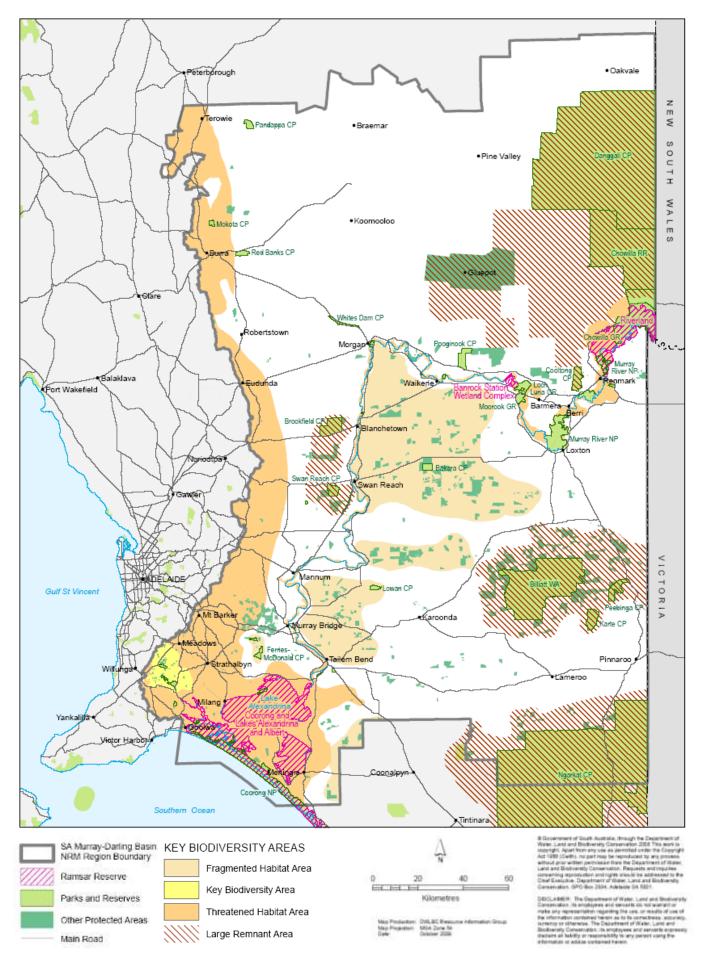


Figure 3. Location of the Murray-Darling Basin NRM region and priority biodiversity conservation areas, current at 1 July 2009.

Note that the NRM region boundary changed between 2004 and 2009.

Relationship to natural resources management targets

The following table summarises the national, state and regional natural resources management targets that the projects contribute to. These targets are from the Caring for our Country Business Plan 2009-2010, SAMDB NRM Plan 2009-2019, the State NRM Plan 2006 and South Australia's Strategic Plan 2007.

Broad Target Themes	Targets State: State NRM Plan 2006; SASP: SA Strategic Plan 2007; SAMDB: SA Murray Darling Basin Natural Resource
	Management Plan 2009-2019)
ENGAGEMENT AND CAPACITY	 Improving knowledge and skills of land managers. 42,000 land managers over 4 yrs who have demonstrated an improvement in knowledge and skills in NRM. (Caring for our Country)
	 Increasing community knowledge and skills by ensuring all regional NRM organisations assist local communities over the next 2 yrs to access knowledge. (Caring for our Country)
	Increasing volunteer participation in NRM. (Caring for our Country)
	 Engaging Indigenous communities by developing at least 20 Indigenous partnerships over 2 yrs that engage Indigenous communities in delivering Caring for our Country. (Caring for our Country)
PROTECTION AND MANAGEMENT	• Increasing landscape scale conservation. 6,700 farmers in priority regions adopting activities that contribute to the ongoing conservation and protection of biodiversity over 4 yrs. (Caring for our Country)
	 Increasing native habitat. At least 400,000 ha, over the next 2 yrs, of native habitat and vegetation that is managed to reduce critical threats to biodiversity and enhance the condition, connectivity and resilience of habitats and landscapes in priority regions. (Caring for our Country)
	 Increasing the NRS. Increasing the area that is protected within the NRS by 5 million ha / yr (priority for under-represented bioregions). (Caring for our Country)
	 Reducing the impact of rabbits over the next 3 years to densities low enough to allow regeneration and recovery of critically endangered and endangered species and communities in priority areas. (Caring for our Country)
	 Reducing the impact and spread of WONS over the next 2 years. (Caring for our Country)
NATIVE	10% improvement in native ecosystem condition by 2030. (SAMDB B1)
VEGETATION CONDITION AND	No net loss of condition and extent. (State B3)
STATUS OF SPECIES AND	 No species or ecosystem moves to a higher risk category and 50% of species move to a lower category by 2030. (SAMDB B3)
COMMUNITIES	No species loss. (SASP T3.1)
	 By 2020, 50% of species and communities in each of the 2006 risk categories have moved to a lower risk category. (State B1)
	By 2011, no species and ecological communities have moved to a higher risk category from 2006. (State B2)
LAND CONDITION	The area of land affected by land degradation processes is reduced by 2030. (SAMDB L2)
	By 2011, land condition improved (compared to 2006). (State L1)
	 A 10% improvement in soil and land condition from 08/09 levels by 2030. (SAMDB L1)

Background to the performance story report

This study used the "participatory performance story report" process and was lead by the Australian Government in partnership with the SAMDB NRM Board. O'Connor NRM Pty Ltd conducted this study between April 2009 and July 2009.

Performance story reports provide a statement of progress towards natural resource management goals and/ or targets, and are supported by evidence at each level of outcome developed in the program logic. Although performance story reports vary in content and format, they are short, mention program context and aims, relate to a plausible results chain, and are backed by empirical evidence (Dart and Mayne 2005^a). Dart and Mayne (Mayne 2003^b) state that credible performance story reports should note intended accomplishments, report achievements against expectations, discuss what was learnt and what will be changed, and describe steps taken to ensure the quality of the data presented.

The performance story report process provides a structured approach to outcomes evaluation and consists of a five part participatory process, and a six part report structure. The process steps used to develop this report are as follows:

- Process step 1: Planning workshop
- Process step 2: Data Trawl
- Process step 3: Social inquiry process
- Process step 4: Outcomes panel
- Process step 5: Evaluation summit workshop.

During the planning workshop, stakeholders created program logic models, which diagrammatically represent the hierarchy of the projects' activities, outputs and outcomes and the links between them. The program logic models created are shown in Figure 2 and 3 and they formed the basis from which the evaluation questions were developed and the framework on which evidence is presented in Section 2: Results Chart.

The following key evaluation question, which defined the scope of the study, was also determined during the planning workshop:

"To what extent did the Australian Government investment in the SAMDB contribute to improving biodiversity, sustainable farm practice and community engagement outcomes, from 2004 to 2009?"

Please refer to Section 6: Process report, for a detailed description of the evaluation methodology.

^a Dart J. J., Mayne J. (2005) Performance Story. In the 'Encyclopaedia of Evaluation' edited by Sandra Mathison (pp.307-308). Sage Publications: Thousand Oaks.

^b Mayne, J. (2003) Reporting on outcomes: setting performance expectations and telling performance stories. Office of the Auditor General of Canada. http://www.oag-bvg.gc.ca/domino/other.nsf/html/99pubm_e.html

Improvements in the state of the asset at the regional scale

(long term)

scale

Improvements in the state of the asset at a local

(medium term, site level)

Protection and management outcomes

(medium term, landscape level)

Engagement and capacity outcomes

(medium term)

Immediate results biophysical

(eg works outputs)

Immediate results non-biophysical

(eg non-works, social outputs)

Influence activities

(eg extension and regulation)

Foundational activities

(eg research, partnership building, staff PD)

By 2011, land condition will have improved (compared to 2006) (State L1)

The area of land affected by land degradation processes is reduced by 2030 (SAMDBL2)

A 10% improvement in soil and land condition from 08/09 levels by 2030 (SAMDBL1)

A 3% in crease in the area of grazing land with soil surface cover (based on 09 levels) by 2014 (SAMDB L2 2)

By 2014 achieve a 6% improvement in wind erosion protection for agricultural cropping land (SAMDB L2.1)

90% of landholders are managing pastures sustainably by 2014 (SAMDBL12)

Improve land management practices: decrease of acidification, erosion In crease soil carbon (Caring for our Country)

Improve knowledge, skills & engagement of land managers (Caring for our Country)

Increase community knowledge and skills (access to) (Caring for our Country)

Workshopsheld (sustainable land management)

Whole farm plans developed

Whole farm plans reviewed and updated

Drought Lot agreements made

Extension activities (including technical support) - workshops (including revegetation planning, drought, soil risk) (WFP) Property planning course conducted (WFP)

Property visits (WFP and Drought Lot)

Incentives for drought lots (Drought Lot)

Stock plan workshop (Drought Lot) Stock containment workshop (Drought Lot)

Training materials. sourced and PM quidelines produced Review and identification of gaps in existing whole farm plans Review of whole farm planning program

Identify priority areas for works (manage and reduce soil loss) Development of communications strategy

Development of partnership agreement for landholders (Drought Lots)

Figure 4: Sustainable land

practices program logic model

Droughtlot guidelines/

Improvements in the state of the asset at the regional scale

(long term)



Improvements in the state of the asset at a local scale

(medium term, site level)

Protection and management outcomes

(medium term, landscape level)

Engagement and capacity outcomes

(medium term)

Immediate results biophysical

(eg works outputs)

Immediate results non-biophysical

(eg non-works, social outputs)

Influence activities

(eg extension and regulation)

activities

(eg research, partnership building,

No net loss of condition and extent (Sate B3)

By 2020, net increase in ecological connectivity across ecosystems (terrestrial, marine and aquatic) (State B4)

No species loss (State B1/B2, SASP T3.1)

A 10% improvement in the condition of 25% of native ecosystems in the region by 2014 (B1.3)

Native ecosystem extent increased by 53% of the region and native ecosystem condition improved across the region by 10% by 2030 (SAMDB

The extent of native ecosystems is increased by 15,000 ha by 2014 (SAMDBB1.2)

No species or ecosystem moves to a higher risk category and 50% of species move to a lower category by 2030 (SAMDB

Figure 5: Biodiversity program logic model

Increase National Reserve System. 5 ha/yr in under represented bioregions Caring for our Country)

Change/better informed park man agement for conservation of the species (TMB)

Reduce the impact and spread of WONS (Caring for our Country)

Reduce the impact of rabbits to allow regeneration of critically endangered species & communities (Caring for our Country)

Increasing Native Habitat - in crease native habitat / yeq. managed to reduce critical threats (Caring for our Country)

Protect and manage an additional 10,000 ha of existing priority remnant native ecosystems (SAMDB

Reduce the impact of critical threats on EPBC listed threatened ecosystem and priority species by 2014 (SAMDB B3 1 & B3 2)

Engage Indigenous communities (Caringforour Country)

Increase landscape scale conservation. No farmers adopting stewardship covenanting, property mgt plans (Caring for our Country)

Encouraging volunteers and building their skills

Improve knowledge, skills & engagement of land managers (Caringforour Country)

Community skill

ie remnant

Landholder

surveys

engagement (BMA)

Habitat & condition

Habitat restoration,

manual (Nigel's

research monitoring

building workshops

management (BMA)

In crease community appreciation of native ecosystems and species by 30% by 2014 (SAMDB B1.4)

Fencing (TF, BMA)

Increase community knowledge and skills (access to) (Caring for our Country)

OGW-strategic weed

control_rabbit and fox

Implementation property

management plans (TF)

Property management

Protective covenants on

private and council land

Facilitation, extension &

partnership for heritage

agreements (BMA)

plans (TF)

(BMA, TF)

control (BMA, TF)

Capacity of community, institutions & regional organisations to sustainably manage natural resources increased (Sate P1)

Increase participation in NRM-support for community to undertake local projects (Caring for our Country)

No. of ha (grazing

threatened species

management,

managed (BB)

Ha of hiabitat

protected (BB)

contracts (BB)

managed &

No. of Eol.

OG works for Parrot corridors and roosting. with LAPs (RP)

Community

awareness raising

through media. workshops.

community call

(sighting hotline)

Bi-annual Parrot

Provide info for

Forests Metric (RP)

community sighting

Recovery plan and

factsheets (RP)

RiverMurray

RP survey's &

hotline (RP)

Biological survey database (gap filling)

surveys (RP)

Prescribed burns (TMB)

Accurate conservation listings (TMB)

Engaged landholder surrounding key Parks (access to land for surveys, participate in surveys) (TMB)

Technical advice to landholders (BMA)

Provide information for fire management planning (TMB)

Supportto implement heritage agreement grants & envirofund (BMA)

Land holder grants Assessment of risks HAs, Other? and threats (TMB)

Threatened Mallee Birds Recovery plan (TMB)

MB surveys & grazing impact study (Chowilla)

Bird survey methodology (TMB)

Site visits and site. management plans (BMA)

School education and children's activities ie world envir day (BMA)

Connections to other projects le Habitat 141 threatened species (BMA)

Survey and promotion of various species (BMA)

Fire management plans

> Billiat/Peebinga (link with Fire Mgt Project)

Bookmark, Ngarkat,

Burn trials - fire research (with Uni's) Seed collected and stored

Threatened flora - Acacia ping trial burn (TF) Revegetation actions on

private land (TF) Translocated threatened flora (TF)

Revegetation plans (TF)

Roadside veg signage (TF)

Community capacity building ie Hartley Hotspots, Monarto Zoo (TF)

Incentive (BB)

man agement plans,

Bat survey (BMA)

Roadside veg surveys (BMA) Research into genetics

CARR's strategy, 2001 MDB Bio Plan (where is priority, where is under represented)

Native Veg. Act. and covenant guidelines

Annual pop. monitoring,

Translocation plans (TF)

Threatened flora recovery

plan (TF) Threatened flora surveys

/searches ID critical habitat, map populations (TF)

Re-ass, study. landholder bidding study (BB)

Baseline veg. condition. assessment (BB)

Metric design (BB)

Auction Design (BB)

Foundational

staff PD)

Section 2: Results

This section presents information about results of the projects, firstly in the overviews below and also in the following four tables; baseline results charts and results and progress charts. The baseline results charts summarise project results achieved through Australian Government investment prior to the Caring for our Country program which was initiated in July 2008. The actions undertaken with Caring for our Country funding are presented in the results and progress charts.

Overview of the sustainable farm practice results charts

Foundational and influence activities

Foundational activities undertaken prior to the Caring for our Country program include the identification of priorities, program design and planning, and development of communication materials for both the Drought Lots and Whole Farm Planning programs. Consultants were engaged to deliver components of both programs and a review of the Eudunda and Rangelands Whole Farm Planning programs was completed.

Training and information were provided to land managers through both programs and the Drought Lots program offered financial incentives for participation.

Foundational and influence activities undertaken with Caring for our Country funds include the review of priorities, update of communication materials and engagement of consultants to deliver the programs. The programs were promoted through articles and media interviews and training and information were provided to land managers. Financial incentives were offered for establishing Drought Lots and Whole Farm Planning demonstration sites.

Immediate results

Program outputs (immediate results, on-ground and non-biophysical) achieved up to July 2008 include participation of 140 land managers, 17 workshops, 103 property visits, 31 operating Drought Lots and 60 Whole Farm Plans completed.

Since July 2008 the programs delivered 10 workshops, made 73 property visits, completed 43 Whole Farm Plans and established 14 Whole Farm Planning demonstration sites and 26 Drought Lots

Engagement and capacity outcomes

Prior to July 2008, through the Drought Lots and Whole Farm Planning programs, the SAMDB NRM Board provided information to at least 5 community/landholder groups and at least 140 land managers, through 17 workshops/training courses and 103 property visits. Land managers involved in the programs are likely to have improved knowledge and/or skills.

Since July 2008, the SAMDB NRM Board provided additional information to 5 community/land manager groups and at least 103 land managers, through 10 workshops/training courses and 73 property visits.

Protection and management outcomes

The Drought Lots and Whole Farm Planning programs established plans or contracts with 103 land managers to improve land management practices (prior to July 2008). Up to 188,857 hectares of land has the potential to be better protected from wind erosion through implementation of Drought Lots.

Since July 2008 an additional 69 plans or contracts have been established with land managers to improve land management practices. An additional 54,543 hectares have the potential to be better protected from wind erosion through implementation of Drought Lots and Whole Farm Plans.

Site condition outcomes

Improvements in land condition were observed by land managers on some properties.

Resource condition outcomes

The contribution of the Drought Lots and Whole Farm Planning programs to land condition change was described by the evaluation expert panel as follows.

The projects are likely to have decreased degradation pressures on a small proportion of properties and to have contributed to improvement in land condition at the local scale by providing the tools and mechanisms for individuals to improve land management practices.

The outcomes for Drought Lots are quality assured and are likely to have improved land condition, including a reduction in soil erosion risk for vulnerable soil types under native vegetation.

Overview of the biodiversity results charts

Foundational and influence activities

Foundational activities undertaken prior to the Caring for our Country program include plans for biodiversity protection and management, auction and metric design for BushBids, production of communication materials and partnership development. Research was undertaken, much of which focussed on improving knowledge of the distribution of species, but also including improving the understanding of threats, habitat requirements, population dynamics and genetics. Studies into constraints for bidding in a conservation tender and vegetation condition in the eastern Mt Lofty Ranges were also undertaken. Monitoring programs were established for the Threatened Mallee Birds, Threatened Flora, Regent Parrot and BushBids programs.

Information, training and support were provided through a range of approaches to land managers, NRM facilitators and community members. Incentives were offered through an environmental stewardship tender and the Heritage Agreement Grant Scheme.

Foundational and influence activities undertaken with Caring for our Country funds include fire management planning for Mallee Emu-wren habitat protection, further development of communication materials, partnership development, monitoring, survey and research. Provision of information, training and support to land managers, NRM facilitators and community members continued. Incentives were offered through the Heritage Agreement Grant Scheme.

Immediate results

Project outputs (immediate results, on-ground and non-biophysical) achieved up to July 2008 include: 155 workshops/ presentations /field days, 93 articles (print and radio media), 41 information sheets/web pages, more than 1,000 site visits, 480 land managers engaged and management actions implemented across more than 1.2 million hectares (public and private land).

Since July 2008 at least 33 site visits were undertaken, 7 workshops /presentations/field days were delivered, 9 articles (print and radio media) were published, 20 community groups were engaged and management actions were implemented for at least 6,944 additional hectares of native vegetation.

Engagement and capacity outcomes

Prior to July 2008 the SAMDB NRM Board provided access to information through more than 1,000 site visits, 155 workshops/field days/presentations, 41 information sheets and 93 articles. The projects engaged 51 community groups, including Indigenous community groups, and more than 408 volunteer hrs were leveraged. 480 land managers were engaged in the projects and are likely to have gained knowledge and skills through participation.

Since July 2008 the SAMDB NRM Board provided additional information to land managers and the community through 7 workshops/training courses, 9 articles and 33 property visits. 65 land managers and 20 community groups, including Indigenous community groups, were engaged in the projects and are likely to have gained knowledge and skills through participation.

Protection and management outcomes

Prior to July 2008 the biodiversity projects supported management of more than 1.2 million hectares of native vegetation to reduce critical threats to biodiversity. This included 428 land managers engaged in conservation management (33 with environmental stewardship contracts and 60 with conservation covenants), rabbit control across 1,800 hectares and management of Weeds of National Significance across 2,700 hectares. 10,489 hectares were placed under permanent conservation covenant.

Since July 2008, management of native vegetation to reduce critical threats continued across approximately 1.2 million hectares. At least 65 land managers continued to be engaged in conservation management including environmental stewardship. One additional Heritage Agreement was established (1,444 hectares) and management of rabbits and Weeds of National Significance continued.

Site condition outcomes

Reduction in the impact of threats and improvement in native vegetation condition were observed at some sites by project participants and staff. Project participants also reported increased observations of target native fauna species.

Resource condition outcomes

The contribution of the biodiversity projects to change in vegetation extent and condition and threatened species status was described by the evaluation expert panel as follows. These statements should be considered within the context of widely acknowledged, continuing decline in vegetation condition in the region.

The projects have contributed to localised to district scale improvement in native vegetation condition. There has been little increase in extent of native vegetation as a direct outcome of the projects being evaluated. The projects have made a significant contribution to the understanding of threatened species distribution and threats.

Improved vegetation management practices as a result of the projects, particularly fire management, have reduced the risk that threatened mallee bird species will be lost through catastrophic events such as fire. Vegetation management undertaken through the Threatened Flora Project, including weed control, reduction in total grazing pressure and strategic burning have improved the viability of some threatened plant populations.

Sustainable farm practice results and progress chart (July 2008 - June 2009)

Purpose of the results and progress chart

This results and progress chart presents a snap shot of what has been achieved with investment under the Caring for our Country program (\$166,000) and South Australian NRM funding (\$80,000). The chart is structured so that the essence of the story can be gained by reading across the columns and down the rows of the program logic. Reading across the columns provides an understanding of performance (expected results in comparison with what was actually achieved). The primary evidence can be sourced from the reference provided in this column.

Abbreviations

DL: Drought Lots WFP: Whole Farm Planning SAMDB NRM Board: South Australian Murray-Darling Basin Natural Resources Management Board

	Summary of baseline at June 2008	Performance expectations and targets between July 2008 and August 2009	Summary of progress against expectations July 2008 to July 2009	Evidence to support results statement July 2008 to June 2009 (superscript numbers refer to information sources listed in Section 5 Index)
Foundational activities conducted from July 2008 onwards (with Caring for our Country funding)	Priorities (including priority areas and issues) were identified for both DL and WFP. The DL program was designed including development of eligibility criteria and the partnership agreement. A range of communication and training materials were developed for DL & WFP. Consultants were engaged to deliver components of both programs. Program Leader undertook assessments and inspections for DLs. Review of WFP program in Eudunda and Rangelands completed.	Review priorities Update communication materials and guidelines Update training materials	Priorities reviewed Communication materials and guidelines updated New program commenced for WFP Consultants contracted to deliver the DL and WFP programs	 Drought Lots Identified mallee soil loss priority for 2008/09²¹. Updated communication materials²¹ Two consultants contracted to run workshops²¹; SAMDB NRM Board site assessments / inspections²¹. Whole Farm Planning Priority risk management issues identified: soil loss, salinity and recharge²³ Planning programs Sheep Connect and Soil Acidity²³ Technical advice provided to DWLBC Climate Change and Land Capability – Wind Erosion and Managing Australia's Soils: a policy paper²³ Tender process for implementing WFP developed²³ Two consultants contracted to run program²³.
Influence activities conducted from July 2008 onwards (with Caring for our Country funding)	Training and information were delivered for both DL and WFP programs. DL program offered financial incentives for participation.	Information provided to land managers Incentives offered for DL and WFP demonstration sites Capacity building / training provided	 Articles and radio interviews. Training and information were delivered for both DL and WFP programs. DL program offered financial incentives for drought lots and the WFP program offered financial incentives for demonstration sites. 	Drought Lots Information, support, training and property visits provided to land managers ^{1,4} ; Program communication & promotion (articles & radio interview) ²³ Incentive offered: up to \$3,000 per 500 sheep ⁵ Whole Farm Planning Information, support, training and property visits provided to land managers ^{6,23} ; workshops (topics: soil loss, salinity and recharge) ²³ Program communication and promotion through articles and radio interview ²³ Incentives offered for WFP demonstration sites (\$1500/site) ²¹

	Summary of baseline at June 2008	Performance expectations and targets between July 2008 and August 2009	Summary of progress against expectations July 2008 to July 2009	Evidence to support results statement July 2008 to June 2009 (superscript numbers refer to information sources listed in Section 5 Index)
Immediate changes – outputs after July 2008	The DL and WFP programs have been successful in engaging land managers, delivering information through workshops, training and site assessments, and in establishing plans and agreements for sustainable farm practice.	 Whole farm plans completed WFP and DL being implemented Community engagement (workshops) 	 43 whole farm plans completed 14 WFP demonstration properties established 26 DLs operating 73 property visits/site assessments 10 workshops held (attended by more than 60 participants) 	 Drought Lots 2 articles (Landcare, Stock Journal)²³ 5 training workshops (2 Stock Containment, 2 StockPlan® & 1 Sheep Connect workshop) in Lameroo and Eudunda with approximately 60 participants^{21,23} 30 site inspections/assessments²¹ 26 DLs operating, total farm area for operating DLs 41,543 ha²¹ Whole Farm Planning 1 article (Stock Journal), Land Management fact sheets, 1 radio interview (managing soils to prevent erosion)²³ 5 workshops (soil loss, salinity and recharge)^{6,21} 43 plans developed (3 areas) representing 43 farming properties (29 plans for salinity and recharge and 14 plans for soil loss in the Mallee)²¹ 14 demonstration sites established (soil loss control)²¹ Approximately 400km fencing established²¹.
Intermediate outcomes - including Caring for our Country targets Engagement and capacity	The DL and WFP programs through the SAMDB NRM Board have provided information to at least 5 community/landholder groups and at least 103 land managers, through 17 workshops/training courses and 103 property visits. 140 land managers involved in the DL and WFP programs are likely to have improved knowledge and/or skills.	Increasing community knowledge and skills by ensuring all regional NRM organisations assist local communities over the next 2 yrs to access knowledge Improving knowledge and skills of land managers by 42,000 over 4 yrs who have demonstrated an improvement in knowledge and skills in NRM	Through the DL and WFP programs the SAMDB NRM Board have provided additional information to 5 community/land manager groups and at least 103 land managers, through 10 workshops/training courses and 73 property visits. 103 land managers involved in the DL and WFP programs are likely to have improved knowledge an/or skills.	Access to knowledge 10 workshops provided for at least 5 community / land manager groups At least 73 property visits Improved knowledge and skills of land managers Approximately 103 land managers involved with WFP and DL
Intermediate outcomes - including Caring for our Country targets Protection and management	103 land managers participating in WFP and DL have plans or contracts to improve their land management practices. Up to 188,857 ha of land will have the potential to be better protected from the risk of wind erosion through implementation of drought lots.	Improve land management practices by 42,000 farmers in priority regions (to reduce the risk of soil acidification and soil loss through wind erosion, water erosion and improve carbon content of soils) 90% of land managers are managing pastures sustainably by 2014 (MAT L1.2)	An additional 69 land managers participating in WFP and DL have plans or contracts to improve their land management practices. An additional 41,543 ha has the potential to be better protected from the risk of wind erosion through implementation of drought lots. An additional 13,000 ha has the potential to be better protected	 69 land managers have management plans and or contracts under the WFP or DL programs²¹ 41,543 ha DLs managed to reduce soil erosion²¹ Approximately 400km of land has been fenced to reduce soil loss, 542 ha of land protected from wind erosion and 12,500 ha of land managed to reduce salinity and recharge under the WFP program²¹.

	Summary of baseline at June 2008	Performance expectations and targets between July 2008 and August 2009	Summary of progress against expectations July 2008 to July 2009	Evidence to support results statement July 2008 to June 2009 (superscript numbers refer to information sources listed in Section 5 Index)
		By 2014 achieve a 6% improvement in wind erosion protection for agricultural cropping land (MAT L2.1)	through implementation of Whole Farm Plans.	
Intermediate outcomes - including Caring for our Country targets Environment	Improvements in land condition have been observed on some properties	A 3% increase in the area of grazing land with adequate soil surface cover (based on 2009 levels) by 2014 (MAT L2.2)	No measurements of land condition chang the time this report was completed.	ge or vegetation cover change over the 2008-2009 period was available at

Biodiversity results and progress chart (July 2008 - June 2009)

Purpose of the results chart

This results and progress chart presents a snap shot of what has been achieved with investment under the Caring for our Country program (\$639,000). The chart is structured so that the essence of the story can be gained by reading across the columns and down the rows of the program logic. Reading across the columns provides an understanding of performance (expected results in comparison with what was actually achieved). The primary evidence can be sourced from the reference provided in this column.

Abbreviations

BEM: Black-eared Miner

DEH: Department for Environment and Heritage

DL: Drought Lots

HA: Heritage Agreement (SA Conservation Covenant)

FTE: Full time equivalent LAP: Local Action Planning

MEW: Mallee Emu-wren

NGO: Non-Government Organisation

RP: Regent parrot

SAMDB NRM Board: South Australian Murray-Darling Basin Natural Resource

Management Board TF: Threatened Flora TMB: Threatened Mallee Bird WFP: Whole Farm Planning

	Summary of baseline at June 2008	Performance expectations and targets between July 2008 and August 2009	Summary of progress against expectations July 2008 to July 2009	Evidence to support results statement July 2008 to June 2009 (superscript numbers refer to information sources listed in Section 5 Index)
Foundational activities conducted from July 2008 onwards (with Caring for our Country funding)	A range of plans for biodiversity protection and management have been produced including recovery plans and fire management plans. Auction and metric designed for BushBids. Communication materials produced include information sheets, posters, booklets, data management tools, reports and websites. Partnerships were established with community groups, NGOs, Government Agencies, Local Government and Universities. Research was undertaken, much of which focussed on improving knowledge of the distribution of species, but also including improving the understanding of threats, habitat requirements, population dynamics and genetics. Studies into constraints for bidding in a conservation tender and vegetation condition in the EMLR were also undertaken. Monitoring programs have been established for TMB, TF, RP and BushBids programs.	 Produce communication materials Continue survey / research Continue monitoring 	 Fire management planning for MEW habitat protection Communication materials developed by BMA Monitoring, surveys and research for MEW, BEM, Malleefowl, RP and BushBids. These studies relating to habitat requirements, population ecology and native vegetation condition. Partnerships maintained 	Bush Management Advisor Project brief for Mallee Batwatch program ¹⁴ Bat Pack (school resource) produced ¹⁴ Partnerships maintained: LAP groups, community / land management groups / land managers, Woorinen Restoration project ¹⁴ BushBids Detecting vegetation condition change study (36 sites reassessed) ⁶⁸ Threatened Flora Review of priorities ¹⁴ Partnerships maintained with LAP groups, DEH, NRM Board, land managers ¹⁴ Threatened Mallee Birds Review of priorities ¹⁴ Planned prescribed burns to protect core BEM habitat in Calperum ¹⁴ BEM and MEW surveys; 22 Malleefowl grids monitored and fox predation research ¹⁴ MEW translocation preparatory study ¹⁴ Partnerships maintained: Woorinen recovery team, CSIRO, Adelaide Uni, DEH and NGOs ¹⁴ Regent Parrot Biennial survey 10 RP colonies; Hogwash Bend studies of tree health and foraging; RP flight corridor design. ¹⁴ Support for monitoring RP breeding colony at Hogwash Bend ¹⁴ Support Mid Murray LAP study of RP flight corridors ¹⁴ Partnerships maintained with Nature Foundation, LAP groups, DEH, community groups, Uni SA, Regent Parrot technical working group ¹⁴ .

	Summary of baseline at June 2008	Performance expectations and targets between July 2008 and August 2009	Summary of progress against expectations July 2008 to July 2009	Evidence to support results statement July 2008 to June 2009 (superscript numbers refer to information sources listed in Section 5 Index)
Influence activities conducted from July 2008 onwards (with Caring for our Country funding)	Information, training and support provided through a range of approaches to land managers (private land managers, Local Government, State Government, Non-Government Organisations, Community Groups), NRM facilitators and community members. Incentives provided through environmental stewardship tender in the EMLR and through the Heritage Agreement Grant Scheme.	Information provision to land managers Capacity building	 Information, training and support provided through a range of approaches to land managers (private land managers, Local Government, State Government, Non-Government Organisations, and Community Groups), NRM facilitators and community members. Incentives provided through the Heritage Agreement Grant Scheme. 	 Bush Management Advisor Provided information and support to land managers (private land managers, Local Government, State Government, Non-Government Organisations, Community Groups)¹⁴ Heritage Agreement Grant Scheme⁵³ Education and awareness through Bat Watch¹⁴ Media interviews¹⁴ BushBids Information and advice provided to land managers for 33 properties and 70 sites through site assessments⁶⁵ Assist land managers with Heritage Agreement Grant Scheme¹⁴ Threatened Flora Provided information, fact sheets and support to land managers (private land managers, Local Government, State Government, Non-Government Organisations, Community Groups)⁵⁷ Threatened Mallee Birds Provided information and support to DEH fire management team⁶ Community monitoring programs for TMB⁶ Regent Parrot Provided information for revegetation planning: LAP groups and River Murray Forest^{3,7,8,13,15} Media interviews¹⁴
Immediate changes – outputs after July 2008	 155 workshops /presentations/field days 93 articles (including print and radio media) 41 information sheets/web pages >1,000 site visits 480 land managers engaged M1.2M ha of native vegetation managed to reduce threats (across public and private land) 	 Management plans Implementation of management plans Land owner and community engagement Heritage Agreements (and other covenants) Fencing Threat management Revegetation Fire management Surveys Prescribed burning / fire management 	 At least 33 site visits 7 workshops / field days / presentations 7 articles, 2 interviews 20 community groups participating At least 6,944 additional ha of native vegetation managed to reduce threats (across public and private land) 	Bush Management Advisor One new HA (1,444 ha) ¹⁴ 32 site management plan prepared ¹⁴ 35km of fencing to protect 4,900 ha of Malleefowl habitat & 600 ha remnant Mallee ¹⁴ 18 property/site visits ¹⁴ 7 field days and community meetings (incl 2 Bat Watch workshops with Gerrard Aboriginal Reserve) ¹⁴ Technical support and training for 20 community groups (biodiversity conservation and threat management) ¹⁴ Boneseed control ¹⁴ Revegetation of 48 ha to buffer remnants and to protect populations of threatened species such as Acadia pingufolia ¹⁴ BushBids 15 site visits for compliance ¹⁴ Threatened Mallee Birds

Summary of baseline at June 2008	Performance expectations and targets between July 2008 and August 2009	Summary of progress against expectations July 2008 to July 2009	Evidence to support results statement July 2008 to June 2009 (superscript numbers refer to information sources listed in Section 5 Index)
			 New Mallee Emu-wren colony discovered¹⁴ Yellow-throated Miner cull at Gluepot and Calperum¹⁴
			Regent Parrot • 200 ha revegetation (food resources for RP) 14
			Community engagement (multiple projects) 3 environmental seminar series ¹⁴ 11 presentations (inc. Growsmart careers camp, Biodiversity week workshop at the SA Museum) ¹⁴
			 7 media/newsletter articles¹⁴ 2 media interviews (television and radio) ¹⁴

	Summary of baseline at June 2008	Performance expectations and targets between July 2008 and August 2009	Summary of progress against expectations July 2008 to July 2009	Evidence to support results statement July 2008 to June 2009 (superscript numbers refer to information sources listed in Section 5 Index)
Intermediate outcomes - including Caring for our Country targets Engagement and capacity	Improving knowledge and skills of land managers: 480 land managers engaged in programs. All interviewees reported an increase in knowledge and skills of land managers. Increasing volunteer participation: 51 community groups engaged, >408 volunteer hrs leveraged by TMB project. Increasing community knowledge and skills: Through the projects the SAMDB NRM Board has provided access to information through more than 1000 site visits, 155 workshops/field days/presentations, 41 information sheets and 93 articles. Engaging Indigenous communities: engagement with indigenous community members through workshops/field days /site visits, the development of a remnant vegetation management plan and negotiations for an IPA.	 Improving knowledge and skills of land managers by 42,000 over 4 yrs who have demonstrated an improvement in knowledge and skills in NRM Increasing volunteer participation in NRM (especially youth) Increasing community knowledge and skills by ensuring all regional NRM organisations assist local communities over the next 2 yrs to access knowledge Engaging Indigenous communities by developing at least 20 Indigenous partnerships over 2 yrs that engage Indigenous communities in delivering Caring for our Country Increase community appreciation of biodiversity 	Improving knowledge and skills of land managers: At least 65 land managers engaged in programs and continuing knowledge and skills development through site visits, management plans and workshops likely. Increasing volunteer participation: At least 20 community groups engaged. Increasing community knowledge and skills: Through the projects the SAMDB NRM Board has provided access to information through more than 33 site visits, 7 workshops/field days/presentations, 2 interviews and 7 articles. Engaging Indigenous communities: Engagement with indigenous community members through 3 workshops.	Improving knowledge and skills of land managers • At least 65 land managers continue to be engaged in programs Increasing volunteer participation in NRM • At least 20 community groups engaged with the projects Increasing community knowledge and skills • At least 33 site visits • 7 workshops / field days / presentations • 7 articles (media/newsletter) Engaging indigenous communities • Engagement with indigenous community members through 2 Batwatch workshops. • Threatened species workshop for Aboriginal women (15 community members attended). ²⁴

	Summary of baseline at June 2008	Performance expectations and targets between July 2008 and August 2009	Summary of progress against expectations July 2008 to July 2009	Evidence to support results statement July 2008 to June 2009 (superscript numbers refer to information sources listed in Section 5 Index)
Intermediate outcomes - including Caring for our Country targets Protection and management	Increasing landscape scale conservation: 428 land managers engaged in conservation management, 33 of which are engaged in environmental stewardship and 60 of which have conservation covenants. Increasing native habitats: >1.2M ha managed to reduce critical threats. Reducing the impact of rabbits: Rabbits managed over 1,800 ha Reducing the impact and spread of WONS: WONS managed over 2,700 ha Increasing the NRS: 10489 ha placed under conservation covenant (Heritage Agreement)	 Increasing landscape scale conservation 6,700 farmers in priority regions adopting activities that contribute to the ongoing conservation and protection of biodiversity over 4 yrs Increasing native habitat At least 400,000 ha, over the next 2 yrs, of native habitat and vegetation that is managed to reduce critical threats to biodiversity and enhance the condition, connectivity and resilience of habitats and landscapes in priority regions. Reducing the impact of rabbits over the next 3 years to densities low enough to allow regeneration and recovery of critically endangered and endangered species and communities in priority areas. Reducing the impact and spread of WONS over the next 2 years. Increasing the NRS. Increasing the area that is protected within the NRS by 5 million ha / yr (priority for underrepresented bioregions). Protect and manage existing priority habitat and remnant native vegetation. 	Increasing landscape scale conservation: At least 65 land managers continue to be engaged in conservation management, including environmental stewardship. One additional Heritage Agreement established. Increasing native habitats: >1.2M ha continue to be managed to reduce critical threats. Reducing the impact of rabbits: Rabbits continued to be managed Reducing the impact and spread of WONS: Boneseed management continued Increasing the NRS: An additional 1,444 ha placed under conservation covenant (Heritage Agreement)	Increase in landscape scale conservation One new HA established Increasing native habitat > 1.2M ha continued to be managed to reduce critical threats. Reducing the impact of rabbits Rabbits continued to be managed Reducing the impact of WONS Boneseed management continued Increasing the NRS An additional 1,444 ha placed under conservation covenant (Heritage Agreement)
	Reduction in the impact of threats and improvement in native vegetation condition have been observed at some sites by project participants and staff. Likewise project participants reported increased observations of target native fauna species.	At the local scale: Improvements in the condition of native vegetation/habitat Reduction in the impact of threats Improvements in the status of threatened species	No measurements of change in threat impacts or na period was available at the time this report was com	

Sustainable farm practice baseline results chart (January 2004 - June 2008)

Purpose of the results chart

Over the last 5 years the Australian Government has invested over \$900,000 into the two sustainable farm practice projects in the SAMDB. This base line results charts aims to 1) present a snap shot of the base condition of drought lot and whole farm planning assets at end June 2008, and 2) to tell the story of how Australian Government investment has already contributed to asset condition up until the end June 2008. The Base line Chart below is the synthesis of multiple lines of evidence that have been collated and appraised against the program logic for the investment story. The chart is structured so that the essence of the story can be gained by reading across the columns and down the rows of the logic. Reading across the columns provides an understanding of performance (expected results in comparison with what was actually achieved). Evidence is provided in a summary statement in the first column next to the expected results with a summary of key evidence in the third column. The primary evidence can be sourced from the reference provided in this column. The final column provides contextual information and evidence that may be exceptions to findings or associated issues.

Abbreviations

BMP: Best Management Practice

DL: Drought Lots

MMCN: Murray Mallee Community Network
MMLAP: Murray Mallee Local Action Planning

Group

WFP: Whole Farm Planning WUE: Water use efficiency

Program logic level	Expected results / activities	Baseline results statement with respect to Caring for our Country targets and outcomes at end-June 2008	Evidence to support baseline results statement Note: all superscript numbers in this column refer to a source item listed in Section 5: Index	Exceptions or issues associated with baseline results
Foundational Activities conducted between 2004 and June 2008	Review and identification of gaps Identify priority areas Communication strategy, materials and guidelines Training materials Drought lot agreement developed	Priorities (including priority areas and issues) were identified for both DL & WFP. The DL program was designed including development of eligibility criteria and a partnership agreement. A range of communication and training materials were developed for DL & WFP. Consultants were engaged to deliver components of both programs. Program Leader undertook assessments and inspections for DLs. Review of WFP program in Eudunda and Rangelands completed.	Drought Lots (initiated in 2007) Communication materials, guidelines: DL program Information Sheet; Local newspaper; personal letters; SAMDB NRM Board Newsletter; SAMDB NRM Board Papers; Stock Journal articles; 2 radio interviews; MMLAP newsletter; Landcare Australia Magazine ^{4,5,15,21} Program design/development: DL process design ^{1,4,15,21} ; DL eligibility requirements ^{4,21} ; 2 Consultants contracted to run workshops ²¹ ; Partnership Agreement for participants/SAMDB NRM Board ^{4,21} , SAMDB Board site assessment / inspections ²¹ Training materials: Stock Containment Workshop Booklet ² ; StockPlan® (Computer-based tool) ⁴ Identify priorities: Dry land farming priorities and priority risk management issues identified. Identified mallee soil loss priority for 2008/09. ²¹ Whole Farm Planning Identify priorities: Report 'Condition of Agricultural Land in SA MDB Region' used to identify need and opportunities for WFP ⁶ ; Existing WFPs identified for review ¹⁷ ; Since 2007 priority areas including: Eudunda and surrounding areas, Eastern Mt Lofty Ranges, Rangelands & Murray Mallee ^{15, 16,17} ; Priority issues identified for each area. ¹⁰ Assessment, Monitoring & Research; Sustainability Index developed and 50 farms assessed ⁶ ; 12 Mallee Sustainable Farming focus paddocks assessed & data analysed ⁶ ; WUE & soil nutrient data from >400 farmers ⁶ ; Pasture monitoring on 20 farms ⁶ ; Pilot study of climate change effects on wind erosion and land capabilty ¹⁰ ; Land Condition Monitoring Summary Report ⁶ Communication materials: Poster ⁶ ; Flyers ⁷ ; local newspapers/newsletters/radio ^{6, 15, 16,17,21} Training materials: Snapshot Now (computer-based tool), 'Plan 2 Profit' training ^{13,15} Program delivery: prior to 2007 delivered by MMCN ²¹ , MMLAP ⁶ ; since 2007 3 consultants contracted to run WFP workshops ^{6,10,11} Review: Program review of Eudunda and Rangelands WFP group completed ⁹	

Program logic level	Expected results / activities	Baseline results statement with respect to Caring for our Country targets and outcomes at end-June 2008	Evidence to support baseline results statement Note: all superscript numbers in this column refer to a source item listed in Section 5: Index	Exceptions or issues associated with baseline results
Influence Activities conducted between 2004 and June 2008 Funded by Australian Government funding	 Information provided to land managers Incentives Capacity building / training 	Training and information were delivered for both DL & WFP programs. DL program offered financial incentives with participation.	Drought Lots Training and information: Information, support, training and property visits provided to land managers ^{1,4} ; 6 Stock Containment and 5 StockPlan® workshops ^{4,21} Incentive: up to \$3,000 per 500 sheep [retrospectively from September 2006 up to \$1,500 per 500 sheep if DL design and construction is consistent with conditions and requirements] ⁵ Whole Farm Planning Training and information: Information, support, training and property visits to land managers ⁶ ; workshops (topics include delving and clay spreading BMP, lucerne BMP, succession planning, pasture management, goal setting, risk management) ^{9,10,15}	WFP information and training provided to land managers prior to 2007 unclear.
Immediate Outcomes – outputs produced up to June 2008	 Whole farm plans Implementation of plans Community engagement (workshops) 	The DL & WFP programs have been successful in engaging land managers, delivering information through workshops, training and site assessments, and in establishing plans and agreements for sustainable farm practice.	 Drought Lots 6 articles; 1+ media opportunity¹⁵ 6 training workshops, with >68 participants²¹ 31 DL proposals accepted²¹ 31 DL operating, total farm area for operating DLs 188,857 ha²¹ Whole Farm Planning 3+ articles; 4 radio interviews, 1 media release⁶,17 >72 land managers engaged in WFP²¹ >72 property visits ⁶,17 >11 workshops⁶,¹7,2¹ Since 2007 5 new WFP groups established⁶,2¹ 28 plans completed (prior to 2007), 32 plans completed (Eudunda and surrounding areas and Rangelands), 10 reviewed⁶,¹0,¹15,¹16,¹17,2¹ 	DL area includes 140,000 ha pastoral country. ²¹ Most participants in the DL program attended 2 workshops.

Program logic level	Expected results and Caring for our Country and regional targets	Baseline results statement with respect to Caring for our Country targets and outcomes at end-June 2008	Evidence to support baseline results statement	Exceptions or issues associated with baseline results
INTERMEDIATE OUTCOMES Baseline at end June 2008 Engagement and Capacity	Increasing community knowledge and skills by ensuring all regional NRM organisations assist local communities over the next 2 yrs to access knowledge Improving knowledge and skills of land managers by 42,000 over 4 yrs who have demonstrated an improvement in knowledge and skills in NRM	Through the DL and WFP programs the SAMDB NRM Board has provided information to at least 5 community/landholder groups and at least 140 land managers, through 17 workshops/training courses and 103 property visits. 140 land managers involved in the DL and WFP programs likely to have improved knowledge and or skills.	Access to knowledge > >17 workshops/training courses provided for at least 5 community/landholder groups ^{17, 21} > >103 property visits ^{6,17, 21} Improved knowledge and skills > >103 land managers involved with WFP & DL ^{6,17, 21} All land managers interviewed (9) gained new knowledge and skills through the WFP and DL programs. ²² 100% of participants (23) who attended a stock containment workshop found information relevant to their needs. ³	Concern that skills / knowledge are not demonstrated. Review of 10 property management planning and whole farm planning participants who attended courses from 1994 to 2003: 4 out of 10 participants stated that they were not conducting no-till because of cost. 12
INTERMEDIATE OUTCOMES Baseline at end June 2008 Protection and management	 Improve land management practices by 42,000 farmers in priority regions (to reduce the risk of soil acidification and soil loss through wind erosion, water erosion and improve carbon content of soils) 90% of land managers are managing pastures sustainably by 2014 (SAMDB L1.2) By 2014 achieve a 6% improvement in wind erosion protection for agricultural cropping land (SAMDB L2.1) 	103 land managers participating in WFP and DL have plans or contracts to improve their land management practices. Up to 188,857 ha of land will have the potential to be better protected from wind erosion through implementation of Drought Lots.	 103 land managers participating in either WFP or DL programs For the DL program, all land managers interviewed (6) stated that the DL plans are achievable.²² Total farm area in operating drought lots 188,857 ha²¹ 	For the new WFP program, implementation has not commenced as the land managers are waiting for their whole farm plans.
INTERMEDIATE OUTCOMES Baseline at end June 2008 Environment	• A 3% increase in the area of grazing land with adequate soil surface cover (based on 2009 levels) by 2014 (SAMDB L2.2)	Improvements in land condition have been observed on some properties.	8 of 9 land managers interviewed believe that their land / soil condition has generally improved since participation in the WFP or DL programs. ²²	

Program logic level	Expected results	Baseline results statement with respect to targets at end-June 2008 Please note: all statements in this column were created by the Expert Panel	Confidence rating	Evidence to support baseline results statement
LONGER TERMS OUTCOMES as judged by outcome panel The area of land affected by land degradation processes is reduced by 2030 (SAMDB L2) By 2011, land condition improved (compared to 2006), (State L1) A 10% improvement in soil and land condition from 08/09 levels by 2030 (RCT L1)	Land degradation reduced and land condition improved	Until the mid 1980s low fuel prices, undeveloped crop varieties, inefficient machinery, high stocking rates, high wool prices, high rabbit abundance, mechanical weed control and vegetation clearance incentives lead to high levels of soil exposure. Since the mid 1980's the reversal of these factors has resulted in reduced rates of degradation. In the period from 2004 to 2008, the reversal of the above factors has continued to drive reduction in the rate of degradation and has led to improvement in soil cover in cropping systems. However, soil types most vulnerable to erosion continue to be at risk despite native vegetation cover. We will continue to see an improvement in land condition due to the change in farming practices, the emergence of new markets (e.g. for alternative crops, carbon and ecosystem services) and changes in land-use and land holder profile.	Moderate to high confidence	92% of land protected from wind erosion (March 2009) compared to 78% in March 2000. ¹⁸ The cumulative protection of cropped land (3 year rolling mean) from erosion in the SA MDB has increased from 267 days (2001/02) to 313 days (2007/08). ²⁰ The number of days agricultural cropping land is not exposed to wind erosion risk increased from 2004 to 2008 in the SA MDB region. A large increase occurred in 2005/06 which may reflect change in attitude and farming practices of land managers. ⁸ The proportion of the crop area sown in the SA MDB using No-Till, as indicated by survey respondents, has increased from 7% (2000) to 47% (2008). ¹⁹ The proportion of cropping survey respondents in SA who burn stubble/residues has reduced from 56% (2000) to 38% (2008). ¹⁹ [Note that these data do not reflect that in very dry seasons, many managers may sell off livestock, thereby easing grazing pressure in paddocks] ¹⁹
Contribution of the projects to longer term outcomes		The projects are likely to have decreased degradation pressures on a small proportion of properties and to have contributed to improvement in land condition at the local scale by providing the tools and mechanisms for individuals to improve land management practices. The outcomes for Drought Lots are quality assured and are likely to have improved land condition, including a reduction in soil erosion risk for vulnerable soil types under native vegetation.	High confidence	

Biodiversity baseline results chart (January 2004 - June 2008)

Purpose of the results chart

Over the last 5 years the Australian Government has invested over \$3.8million into the biodiversity projects in the SAMDB. This base line results charts aims to 1) present a snap shot of the base condition of biodiversity assets at end June 2008, and 2) to tell the story of how Australian Government investment has already contributed to asset condition up until the end June 2008. The Base line Chart below is the synthesis of multiple lines of evidence that have been collated and appraised against the program logic for the investment story. The chart is structured so that the essence of the story can be gained by reading across the columns and down the rows of the logic. Reading across the columns provides an understanding of performance (expected results in comparison with what was actually achieved). Evidence is provided in a summary statement in the first column next to the expected results with a summary of key evidence in the third column. The primary evidence can be sourced from the reference provided in this column. The final column provides contextual information and evidence that may be exceptions to findings or associated issues.

Abbreviations

BACI: Before After Control Impact

BEM: Black-eared Miner

CARE team: Community Action in the

Rural Environment

CARRS: Comprehensive, Adequate and

Representative Reserve System DEH: Department for Environment and

Heritage

EMLR: Eastern Mt Lofty Ranges HA: Heritage Agreement (SA Conservation Covenant)

ID: identification

IPA: Indigenous Protected Area

IUCN: International Union for the

Conservation of Nature

LAP: Local Action Planning Group

MEW: Mallee Emu-wren

NGO: Non-government organisation NRM: Natural Resources Management

NRS: National Reserve System

RP: Regent parrot

TMB: Threatened Mallee Birds TSN: Threatened Species Network WCF: Wildlife Conservation Fund WONS: Weeds of National Significance

WWB: Western Whipbird

Program logic level	Expected results / activities	Baseline results statement with respect to Caring for our Country targets and outcomes at end-June 2008	Evidence to support baseline results statement Note: all superscript numbers in this column refer to a source item listed in Section 5: Index	Exceptions or issues associated with baseline results
Foundational Activities conducted between 2004 and June 2008	Plans: Recovery, Reserve, Fire Management, Auction & metric design Communication materials Survey/ Research Monitoring	A range of plans for biodiversity protection and management have been produced including recovery plans and fire management plans. Auction and metric designed for BushBids. Communication materials produced include information sheets, posters, booklets, data management tools, reports and websites. Partnerships were established with community groups, NGOs, Government Agencies, Local Government and	Bush Management Advisors Project staff: 1 FTE 2004-2009 (except vacant Jan-Aug 2006) Major contributor to plans: CARRS Strategy for SAMDB ^{1, 43} ; NCSSA Bushland Condition Monitoring Manual: Murray Darling Basin South Australia. Volume 1: Field Guide to Bushland Monitoring (2005) ^{1, 44} ; Murray Mallee Vegetation Conservation Strategy ^{1, 45} ; landscape fire management planning in protected areas ¹ ; Benchmark and Monitoring report ^{1, 42} ; Best practice guidelines for seed collection and storage ^{1, 46} Major contributor to implementing projects: Habitat Management and Restoration project ¹ ; landscape fire management plans ¹ ; Threatened Species Recovery Programs ¹ Communication materials: Riverland and mallee wildlife posters ^{4, 5} ; Dieback in the SAMDB Booklet ^{1, 48} Survey, research and monitoring: Roadside Vegetation Survey for Southern Mallee District Council ^{5, 47} ; ID regional monitoring sites ¹ BushBids Protocols and Communication materials: Project policies, metric and auction design, data management tools and protocol, communication protocols and materials (1 brochure, 4 factsheets, advertisements, presentations). ⁶⁵ Partnership, support and funding leveraged: NCSSA, DWLBC; Designer Carrots funding, Native Vegetation Council funding Survey, research and monitoring: BACI monitoring design to assess outcomes of investment; initial site assessment veg condition as baseline; critical land manager and service provider constraints to conservation tender bid development study and report; vegetation condition in the EMLR study and draft report; bushland condition change study. ^{65, 66, 67, 8, 68}	Fire in Bookmark Biosphere 2006

Program logic level	Expected results / activities	Baseline results statement with respect to Caring for our Country targets and outcomes at end-June 2008	Evidence to support baseline results statement Note: all superscript numbers in this column refer to a source item listed in Section 5: Index	Exceptions or issues associated with baseline results
		Universities. Research was undertaken, much of which focussed on improving knowledge of the distribution of species, but also including improving the understanding of threats, habitat requirements, population dynamics and genetics. Studies into constraints for bidding in a conservation tender and vegetation condition in the EMLR were also undertaken. Monitoring programs have been established for TMB, TF, RP and BushBids programs.	Threatened Flora Project staff: 0.8 FTE 2004/05, 0.4 FTE 2006, 0.2 FTE 2007/08 Plans: South Australian Murray-Darling Basin Threatened Flora Recovery Plan 2005-2010 (for 9 EPBC listed species); Translocation proposals for Acacia pinguifolia and A rhetinocarpa ⁶⁰ ; Draft Management Plan for Meningie Reserve ⁶¹ ; Survey and monitoring methodology for Phebalium lowanense ⁵⁷ . Communication materials: 10 species and project factsheels ⁵⁷ ; Threatened flora database ⁵⁷ Survey, research and monitoring: annual plant population survey with total 380 sites surveyed from 2004-2007 ^{57,58} ; 74 new occurrences discovered ^{57,58,58,58,58} ; Phebalium lowanense Monitoring Report ^{11,12,62} ; distribution mapping for 9 species ⁵⁸ Bushland Condition Monitoring sites established and baseline data collected for 7 sites ⁵⁷ , reassessed 2008 ⁵¹ ; Acacia pinguifolia fire management trial (early results positive) ^{6,58} ; Genetic research with Adelaide University for 3 species ⁵⁷ Partnerships, support and funding leveraged: Partnerships with LAP groups, DEH, NRM Board, land managers; Recovery Team established; Grants from TSN, Coorong Council and Native Vegetation Council ⁶⁰ Threatened Mallee Birds Plans: Recovery Plans for Red-lored Whistler, WWB, MEW and Striated Grasswren (2006-2011) ¹¹ ; TMB, BEM and Malleefowl recovery program reviews ^{16,11,12} ; BEM translocation plans ¹⁸ ; MEW listed as endangered on IUCN red list ⁵⁸ ; ID priority restoration sites for Southern mallee birds ⁵⁷ ; Review of the Threatened Mallee Birds Recovery program ²⁷ Communication materials: 5 species factsheets ³ ; 9 declining mallee birds profiles ^{5,7,41} ; Mallee birds webpage ³ Survey, research and monitoring: Grazing effects on birds in the northern mallee study ^{3,5,7,30} ; Monitoring and survey; WWB and MEW ^{11,2} , BEM ^{6,8,13} ; Mulleefowl ^{6,8,13} ; WWB detectability study ³ ; distribution assessment ^{7,6} ; MEW habitat study ⁷ ; MEW gard sidsribution survey; MeW ^{12,8} , Malleefowl ^{6,8,13} ; WWB detectability study ³ ; distribution assessment ^{7,6} ; MEW habitat	

Program logic level	Expected results / activities	Baseline results statement with respect to Caring for our Country targets and outcomes at end-June 2008	Evidence to support baseline results statement Note: all superscript numbers in this column refer to a source item listed in Section 5: Index	Exceptions or issues associated with baseline results
Influence Activities conducted between 2004 and June 2008 Funded by Australian Government funding	Information provision to land managers (including roadside veg signage) Incentives Capacity building	Information, training and support provided through a range of approaches to land managers (Private Land managers, Local Government, State Government, Non-Government Organisations, Community Groups), NRM facilitators and community members. Incentives provided through environmental stewardship tender in the EMLR and through the Heritage Agreement Grant Scheme.	 Bush Management Advisors Provided information and support to land managers (Private Land managers, Local Government, State Government, Non-Government Organisations, Community Groups) Provide information to CARE team^{1,48} Heritage Agreement Grant Scheme⁵³ BushBids Incentives offered \$1,229,677 through 2 rounds of reverse tender single sealed bid⁶⁵ 45% (17 out 38) landowners contacted service providers (NRM officers / contractors / environmental consultants) for support and advice in developing bid price⁶⁹ Information and advice provided to land managers for 63 properties and 99 sites through site assessments⁶⁵ Threatened Flora Provided information, fact sheets and support to land managers (Private Land managers, Local Government, State Government, Non-Government Organisations, Community Groups)⁵⁷ Threatened Mallee Birds Provided information and support to DEH fire mgt team⁶ Developing community monitoring programs for TMB⁶ Regent Parrot Provided information for revegetation planning LAPs and River Murray Forest^{3,7,8,13,15} 	

Program logic level	Expected results / activities	Baseline results statement with respect to Caring for	Evidence to support baseline results statement	Exceptions or issues associated
ICVCI	activities	our Country targets & outcomes at end-June 2008	Note: all superscript numbers in this column refer to a source item listed in Section 5: Index	with baseline results
Immediate outcomes – outputs produced up to June 2008	Prescribed burning/fire management Roadside vegetation signage Seed collection and storage Revegetation Threat management Fencing Heritage Agreements (and other covenants) Management plans Implementation of management plans Community engagement	 155 workshops /presentations/field days 93 articles (including print and radio media) 41 information sheets/web pages >1,000 site visits 480 land managers engaged >1.2M ha of native vegetation managed to reduce threats (across public and private land) 	■ 27 articles; 26 media opportunities; 74 workshops/presentations/field days¹.4.5.9.11 ■ 249 site / property visits (includes HAs)¹? ■ 287 land managers engaged, 30 community groups engaged¹? ■ 51 new Heritage Agreements established for 9,854 ha ■ HA Grant Scheme: 140 grants for 89,260 has³ ■ 72,000 ha HAs actively managed¹? ■ 3,695 ha fenced (10 HAs)⁴ ■ 5 revegetation plans for 57 ha, 7 ha dune revegetation work, 350 ha planned¹? ■ 80 sessed control >1000 ha².5.52 ■ Bridal Creeper Management Plan produced for South Mallee District Council (80,000 ha)¹7.51 ■ Fox control over 281,900 ha¹? ■ Site visits/inspections to assess impact of illegal activities eg trail bike riding & brush cutting/harvesting broom9.10 ■ SushBids ■ 88 landholder enquiries®9 ■ 33 land managers contracted to deliver management services at 70 sites (2,256 ha). Majority contracted to manage for 10 years⁵ ■ 121 site visits®9 ■ 77 management plans produced (2,962 ha)®9 ■ 9 new Heritage Agreements (365 ha), 2,287 ha weed management, 1,661 ha of WONS (boneseed, bridal creeper, blackberry, gorse and athel pine), 2,214 ha feral animal management (including 1,786ha for rabbits), 6.3 km fencing, 2,256 ha stock grazing management (including 1,491 ha strategic grazing) ^{65,69} ■ Habitat management and protection for 1 endangered plant species, 7 vulnerable species (1 plant, 6 animals), 19 rare species (17 plants, 2 animals) ⁹⁹ ■ High level of compliance with management plans ^{99,70} ■ Threatened Flora ■ 4 articles, 18 workshops/presentations/field days ^{7,61} ■ Site visits: 618 for survey, 100 additional to survey ⁵⁷ ■ 96 land managers engaged, 6 community groups engaged³® ■ 3 revegetation plans for 3 properties, and assisted DEH revegetation at Rocky Gully ^{57,58} ■ Seed collection and storage with the Millennium Seed Bank project for 9 threatened flora species ⁵⁷ ■ 4 sites fenced, 3 sites orchids protected from grazing by cages ⁵⁷ ■ Annual weed control: Bridal Creeper, Pine, African Boxthorn, Golden Wreath Wattle, Gazani	HA Grant Scheme quantities provided for the period 2004-2009 HAs managed: (Browns Well 8 HA covering 6,800 ha; Mantung Maggea HA covering over 11,800 ha; Gluepot Reserve HA covering 54,000 ha) Note that area of HA actively managed is calculated based on the entire area of each HA although activities may focus on part of the area. Addition threats to those described in project reports are likely to have been addressed through HA visits. BushBids management plan compliance determined from annual reporting and auditing in 2007 (6 sites) and 2008/2009 (15 sites).

Program logic level	Expected results / activities	Baseline results statement with respect to Caring for our Country targets & outcomes at end-June 2008	Evidence to support baseline results statement Note: all superscript numbers in this column refer to a source item listed in Section 5: Index	Exceptions or issues associated with baseline results
			 Threatened Mallee Birds 14 articles, 2 papers, 4 media opportunities, 20 workshops/presentations/field days^{6,7,11, 12,13,} 4 land managers engaged, 7 community groups engaged^{6,7} 408 volunteer hrs for Malleefowl grid monitoring, many additional hrs contributed by expert volunteers for bird survey⁶ 1.1M ha managed to reduce critical threats (fire) in the Bookmark Biosphere, 54,000 ha in the Ngarkat, Billiat 	
			 and Bakara areas managed to reduce critical threats⁷⁹ Habitat protection burns for MEW ⁸ Habitat protection burns planned for 09/10 MEW and BEM¹³ Yellow-throated Miner control for BEM^{6,13} Regent Parrot 	
			 12 articles, 3 media opportunities, 3 workshops/ field days, direct mailout, interpretive signage at 1 site, online diary⁷ 43 online diary entries^{25, 26} 8 land managers engaged, 8 community groups engaged⁷ 1 site fenced⁷ 2 revegetation plans produced⁷ 	

Program logic level	Expected results and Caring for our Country Targets	Baseline results statement with respect to Caring for our Country targets and outcomes at end-June 2008	Evidence to support baseline results statement	Exceptions or issues associated with baseline results
INTERMEDIATE OUTCOMES Baseline at end June 2008 Engagement and Capacity	 Improving knowledge and skills of land managers by 42,000 over 4 yrs who have demonstrated an improvement in knowledge and skills in NRM Increasing volunteer participation in NRM (especially youth) Increasing community knowledge and skills by ensuring all regional NRM organisations assist local communities over the next 2 	Improving knowledge and skills of land managers: 480 land managers engaged in programs. All interviewees reported an increase in knowledge and skills of land managers. Increasing volunteer participation: 51 community groups engaged, >408 volunteer hrs leveraged by TMB project. Increasing community knowledge and skills: Through	 Improving knowledge and skills of land managers ■ Since participating in BushBids: 74% of land managers interviewed reported an increase in enthusiasm for managing native vegetation, 55% reported a greater awareness of environmental issues on their property, 60% reported increased knowledge about the condition of their native vegetation, 41% reported increased knowledge or skills for managing native vegetation, 60% reported an increase in knowledge about the costs involved in managing native vegetation, and 40% reported an increased knowledge of threats to native plants and animals⁷¹ ■ All land managers (6) and strategic informants (11) interviewed for this study reported gains in the knowledge or skills of land managers Increasing volunteer participation in NRM ■ 51 community groups engaged through BMA, TF, TMB and RP programs 67.58 	85% of land managers participating in BushBids indicated that conservation was a main land use activity. 40% of land managers also considered agriculture and or ecotourism as a main land use.66
	yrs to access knowledge • Engaging Indigenous communities by developing	the projects the SAMDB NRM Board has provided access to information through more than 1000 site visits, 155 workshops/field	 >408 volunteer hours leveraged through one component of TMB program⁶ Increasing community knowledge and skills 	

Program logic level	Expected results and Caring for our Country Targets	Baseline results statement with respect to Caring for our Country targets and outcomes at end-June 2008	Evidence to support baseline results statement	Exceptions or issues associated with baseline results
	at least 20 Indigenous partnerships over 2 yrs that engage Indigenous communities in delivering Caring for our Country Increase community appreciation of biodiversity	days/presentations, 41 information sheets and 93 articles. Engaging Indigenous communities: engagement with indigenous community members through workshops/field days /site visits, the development of a remnant vegetation management plan and negotiations for an IPA.	 Over 1000 site visits, 155 workshops/field days/presentations, 41 information sheets/web pages, 93 articles (including many local media and 2 peer reviewed publications) Engaging indigenous communities BMA: Raukkan and Gerard Communities: development of management plans to protect 800-2000 ha under HA or IPA, site visits, camp, talk, workshops, assistance with funding proposals, general biodiversity management support and advice, IPA negotiations. Approx. 58 community members / land managers (children and adults) involved.^{1,72} Threatened species: workshop for Aboriginal women including topics on threatened species management and monitoring projects. 15 community members attended.^{1,72} 	
INTERMEDIATE OUTCOMES Baseline at end June 2008 Protection and management	 Increasing landscape scale conservation 6,700 farmers in priority regions adopting activities that contribute to the ongoing conservation and protection of biodiversity over 4 yrs Increasing native habitat At least 400,000 ha, over the next 2 yrs, of native habitat and vegetation that is managed to reduce critical threats to biodiversity and enhance the condition, connectivity and resilience of habitats and landscapes in priority regions. Reducing the impact of rabbits over the next 3 years to densities low enough to allow regeneration and recovery of critically endangered and endangered species and communities in priority areas. Reducing the impact and 	Increasing landscape scale conservation: 428 land managers engaged in conservation management, 33 of which are engaged in environmental stewardship and 60 of which have conservation covenants. Increasing native habitats: >1.2M ha managed to reduce critical threats. Reducing the impact of rabbits: Rabbits managed over 1,800 ha Reducing the impact and spread of WONS: WONS managed over 2,700 ha Increasing the NRS: 10489 ha placed under conservation covenant (Heritage Agreement)	Increase in landscape scale conservation ■ 428 land managers engaged in conservation management through BMA, TF, RP and BB programs ⁶⁵ Of the total land managers engaged: ■ 60 new HAs established ^{55,65} ■ 33 land managers engaged in environmental stewardship through BushBids ⁶⁵ Increasing native habitat ■ >1.2M ha managed to reduce critical threats ■ 15% of known (mapped) native vegetation on private property within BushBids project boundary under management agreement ⁶⁵ Reducing the impact of rabbits ■ Rabbits managed over 77,657 ha through BMA, BushBids and Threatened Flora programs Reducing the impact of WONS ■ WONS (boneseed, bridal creeper, blackberry, gorse and athel pine) managed over 2,700 ha through Bush Management Advisor, BushBids and Threatened Flora programs Increasing the NRS 10,489 ha placed under HA since 2004 (60 sites) ⁵⁵	Fox control accounts for the largest proportion of the area managed. Other threats managed include: stock grazing, rabbits, weeds, overabundant native species (Kangaroos and Yellow-throated Miners), and inappropriate fire regimes.

Program lo	ogic level	Expected results and Caring for our Country Targets	Baseline results statement with respect to Caring for our Country targets and outcomes at end-June 2008	Evidence to support baseline results statement	Exceptions or issues associated with baseline results
		 spread of WONS over the next 2 years. Increasing the NRS. Increasing the area that is protected within the NRS by 5 million ha / yr (priority for under-represented bioregions). Protect and manage existing priority habitat and remnant native vegetation. 			
INTERMED OUTCOMES Baseline at 2008	S end June	At the local scale: Improvements in the condition of native vegetation/habitat Reduction in the impact of threats Improvements in the status of threatened species	Reduction in the impact of threats and improvement in native vegetation condition have been observed at some sites by project participants and staff. Likewise project participants reported increased observations of target native fauna species.	 5 boneseed plants found during follow up of control work over 50ha^{9, 10} Bridal Creeper rust infection sustained at 7 release sites.⁶⁰ Reduction in weed cover at managed sites.⁷³ Net gain of 13 plants from <i>Acacia pinguifolia</i> burn trial⁶¹ Successful revegetation of sand dunes¹⁷ 4 of the 6 participants interviewed reported improvements in native vegetation condition and or increases in native fauna sightings and or reduction in threats.⁷⁷ 	

Program logic level	Expected results	Baseline results statement with respect to targets at end-June 2008 Please note: all statements in this column were created by the Expert Panel	Confidence rating	Evidence to support baseline results statement
Longer term outcomes as judged by outcome panel 10% improvement in native ecosystem condition by 2030 (RCT B1) No net loss of condition and extent (state B3)	Priority areas in improved condition	There has been a decline in the condition of native ecosystems over the past 50 years. Since 1983 the rate of this decline has been reduced due to the introduction of the Native Vegetation Act, Heritage Agreements and incentives for protecting and managing remnant vegetation. More recently, the impact of Rabbit Calicivirus Disease has contributed to slowing the decline in condition. In many systems, drought conditions have lead to continued significant decline in condition; however localised improvements have occurred where management has been undertaken. There is likely to be continued broad scale decline in vegetation condition, linked to drying conditions and landscape scale processes. Some localised improvements are likely to result from ongoing and future management; however, these improvements will be negligible compared with regional-scale decline.	High confidence High confidence Moderate confidence	 Local examples of improvement see above Riparian vegetation along river declining due to over extraction of water and regulation of River. Huge decline for River Red Gums. 18 There is no quantitative evidence of condition change at the landscape or regional scale however expert opinion agrees that the condition of native vegetation/habitat in the region is generally stable or declining due to drought (6 expert / strategic informants)
Contribution of the projects to longer term outcomes		The projects have contributed to localised to district scale improvement in native vegetation condition.	High confidence	
Longer term outcomes as judged by outcome panel 53% increase in extent of native ecosystems by 2030 (RCT B1) No net loss of condition and extent (state B3)	Increase in native vegetation and habitat	There has been a decline in the extent of native vegetation over the past 50 years. As a result of the introduction of the Native Vegetation Act in 1983 the rate of decline has slowed. The extent of native vegetation has not changed significantly in the period 2004-2008. However, there has been some localised loss of native vegetation and changes in the state of vegetation in some patches. Ongoing programs of revegetation have the potential to increase the extent of native ecosystems over the next 20 years. There are continuing risks of vegetation loss from prolonged drought, floodplain drying and climate change.	High confidence High confidence Low confidence	 Approximately 65 ha revegetation through Bush Management Advisor, BushBids and Threatened Flora program Regent Parrot project links with River Murray Forest
Contribution of the projects to longer term outcomes		There has been little increase in extent of native vegetation as a direct outcome of the projects being evaluated.	High confidence	

Program logic level	Expected results	Baseline results statement with respect to targets at end-June 2008 Please note: all statements in this column were created by the Expert Panel	Confidence rating	Evidence to support baseline results statement
Longer term outcomes as judged by outcome panel	Species and communities less threatened	Over the last 50 years there has been widespread decline in species distribution and abundance, predominantly driven by the loss and degradation of habitat.	Very high confidence	Knowledge/understanding of the status of mallee birds improved ^{75, 76} Malleefowl
No species or ecosystem moves to a higher risk category and 50% of species move to a lower category by 2030 (AMLR B3) No species loss (State B1/B2, SASP T3.1)		In the period from 2004-2008 a review (and standardisation of criteria) of the threatened species schedules under the National Parks and Wildlife Act lead to re-classification of some species to higher extinction risk categories. Both the increased knowledge of threats and population trends and the ongoing decline in habitat extent and quality are likely to have influenced these changes. [e.g. the Mallee Emu-wren was upgraded from Vulnerable to Endangered in South Australia due to active declines and increased knowledge of trends.] Without concerted activity, the risk of extinction for threatened species will remain the same or increase. Two bird species are at particularly high risk of extinction at the regional or State scale. (Western Whipbird and Mallee Emu-wren, respectively).	High confidence Moderate confidence	Local improvement reported in Browns Well area. 17,77 Local decline reported by one land holder. Decline continuing due to drought. 20,75 BEM Status stable since 200478, decline reduced through successful translocation and fire management 77, continuing decline due to fire and drought 20,75 MEW Status declining due to fire and drought 20,78,75 WWB Unknown 20,78, probable decline 75 Regent Parrot 400 breeding pairs in the SA (2003/2004). Food resources
Contribution of the projects to longer term outcomes		The projects have made a significant contribution to the understanding of threatened species distribution and threats. Improved vegetation management practices as a result of the projects, particularly fire management, have reduced the risk that threatened mallee bird species will be lost through catastrophic events such as fire. Vegetation management undertaken through the Threatened Flora Project, including weed control, reduction in total grazing pressure and strategic burning have improved the viability of some threatened plant populations.	High confidence	are limited. ¹⁸ Likely that decline is continuing although some colonies (down-stream of Berri) are increasing. ¹⁸ The status is unlikely to have changed. ¹⁹ Threatened Flora Change in status due to improved knowledge e.g. Acacia rhetinocarpa, largest population in the region discovered through project; improved regional status from endangered to vulnerable. ⁷⁴ Unrealistic to expect change in status due to management in 3-4 year time frame. ^{73,74} Acacia pinguifolia: 10% decline in number of mature individuals annually ⁷³ , regeneration promoted by trial burn ⁶¹ , survival of translocated plants. ⁷⁴ Orchid numbers fluctuate with seasonal conditions. ⁷³ Others species appear to be stable (e.g. shrub species) but with threats such as weed invasion and drought/climate change decline is likely. ⁷³

Section 3: Instances of significant change

The following vignettes were chosen by the participants of the summit workshop as representing the most significant changes occurring as a result of investment in the Projects. These vignettes were chosen out of three sets of vignettes (27 in total).

What is a vignette?

Vignettes are stories or parts of stories used to elicit responses, interpretations and judgments about a particular set of circumstances or context within a research setting. Typically used in the qualitative social sciences, vignettes offer a method for simulating complex events, outcomes and/or problems and use these to explore people's perceptions, opinions, beliefs and attitudes. In this case, the vignettes were extracted directly from interview transcripts, which were captured with digital audio recording. While edits were kept to a minimum, some text was removed; this is indicated by three dots between sentences.

Vignette #1: Enough dust

I was one of the first land owners to take up the drought lot offer. [Previously] we were running our stock wholly and solely on the farm and not shutting them up, and we were noticing that they'd overgrazed the sandy ground and weren't grazing the heavier ground properly. So we started off probably 20 years ago fencing a lot of areas off so could utilise the heavier ground and overgraze it, but that's still not a very good thing, because it still blows dust and gives you the shits most of the time. You know, it's more frustrating than anything else. You look out and everything's blown away... we fenced a lot of it, to land classes. ...We haven't got a straight fence on the place... but we've made some pretty big changes to our cover and that. We direct drill all our crop now into stubbles, and no burn and slash or anything like that. Hopefully we're trying to do the right thing, but the dollars in the bank is the main thing you've got to get.

Well, the [drought lot] incentive that was given by the NRM was very, very generous, I thought, when I sat down and did costings of that sort of thing. I can't really work out why every farm didn't take up the offer to put something like that in place; whether they just used it one in three or four years, because that was a pretty good incentive that we got. But we'd already done a couple of yards ourselves, and it just enabled us to build a couple more.

I didn't have any trouble at all with the [drought lot] agreement, and the good part about that, I think they employed a very good person in [the consultant] to give people advice as well. We've worked with her for a number of years now, and she really knows her stuff. ... She's the leader in the field of stock feeding and management, and she's only a phone call away. If we have any problems or whatever, we just give her a call, and she'll point us in the right direction. ...

....but now when you've got [the sheep] shut in a small confined area, you've got a patch of 100 metres square or 50 metres square. That blows up enough dust!

Participant

- It provides a farmer perspective and illustrates the financial imperative underlying private land management decisions.
- It illustrates that the farmer had identified the problem themselves and taken some action in the past, however, additional action was limited by financial constraints.
- It highlights that incentive payments are a critical tool in encouraging improved stewardship in some circumstances.
- It illustrates that this farmer was able to undertake careful calculations of cost and subsequently determine that the fixed-rate incentive payments were generous.
- It highlights feelings of easy access, trust and confidence in the technical support (leadership) given by the consultant.

Vignette #2: Peace of mind and a plan to get you through

The biggest change for me as a result of the drought lot program has been thinking about our business as a whole. The actual drought lot itself has been one of the best decisions that we have made for our business and made my time more efficient which has made my life easier now it has been completed. It also gives me peace of mind knowing that my stock are in there and being fed adequately to their needs and I'm also looking after my property.

...I'm in a small grower group... as producers we would try to get together once a month. We had a facilitator and we went through a process of looking at our own farming businesses. So I guess that initially really got me thinking about my business and trying to ascertain good decisions from bad decisions - yes that was the start of my initial thinking. Then I guess it tends to snowball from there because the more you look into your business the more you become aware. Also in small groups like this you tend to find out more about what's going on and available. You listen to other farmers and hear what's working for them and what's not.

Throughout the drought there have been different publications on what funding is available and what could be helpful to your own situation. We have been successful in some of these applications - when your farm is struggling financially and you can't put some of you plans in place - well the financial support makes a huge difference. It can be just enough to start making changes. Even with the drought lot funding it didn't cover all the costs but it was enough to make the scales go the other way, to shift in your favour.

I guess it's about being proactive, too. You can't just bury your head in the sand and go "Oh woe is me! It's the drought; poor me!" You just can't, it gets you down! If you have that attitude it's a no win situation. You have to always be on the lookout for a solution and a plan to get you through.

Participant

This vignette was considered significant by the participants at the summit workshop for the following reasons:

- It demonstrates how the drought lot program was a critical support to move the land manager towards holistic farm business planning and management.
- It highlights a positive attitude of the land manager, openness to ideas and a preparedness to change traditional practices to be more resilient to the pressures of farming in climate uncertainty.
- It demonstrates the importance of provision of information and support options to facilitate land manager changes to sustainable practice.
- It demonstrates how increased knowledge and awareness can lead to change in management and emphasises the importance of incentives in some circumstances.
- It provides testimony to the value of landholder management groups, and the role these play in exchange of information and increased knowledge of, and access to, funding opportunities.

Vignette #3: Whole Farm Planning: doing it for the next generation

Just thinking about the future, where we can make improvements and actually plan to do those improvements. You can have all these ideas, but ... sometimes it helps to actually write them down and then even if you don't look at them for six months, go back and have a look, and you can see what you're up to and what you might have already done, and what you should be doing...

If you don't take your stock out of your paddocks, before your stubble feed is gone, it doesn't take long for your soil to become very fragile, and you get a wind, and you get all this dust— ...it's horrible. We've got a few neighbours here who aren't doing it, and as soon as you get a wind change, we cop all their dust from up this way. So just trying to manage the environment, I suppose, is one thing that the drought lots have helped with. ... we got the funding [for drought lots]. ...We had it all finished except the shade area hasn't quite been done. We've planted the trees, but they've got to grow before they're going to provide adequate shade...

... [The Consultant] helped bring up some issues and made us look at what we want to do instead of just going from one day to the next, what we want to be doing in five years' time or even 10 years' time— [looking] at improvements that we can make around the place.

... we'd like to be able to give the next generation a farming business that will run for a profit for them; not leave them with a rundown place that they have to spend lots of time and money just to get it up and running again. I think the next generation is probably the most important thing about the whole farm planning.

Participant

This vignette was considered significant by the participants at the summit workshop for the following reasons:

- It provides a farmer perspective on the importance of long-term planning, succession planning and intergenerational sustainability of the farming enterprise.
- It illustrates the importance of a written plan in tracking and adjusting management goals and actions.
- It suggests that engagement in sustainable farm practice activities is not widespread and that poor management can have off-farm impacts, including impacts on neighbours.
- It highlights the importance of 'experts' to facilitate longer-term planning and to discover issues and suggest improvements.

Vignette #4: Tackling issues as a group

A high percentage of native vegetation still remains on our property. ...I can go back to the 1960s when rabbits ran amuck everywhere; we had sand hills that were blowing out in our so-called cropping country. The scrub below that ran the rabbits; they'd eaten out the under-story, and virtually destroyed anything new that wanted to grow. They'd destroy any new plants or anything like that, so it was pretty degraded down and buggered, actually. That's basically what it was like years ago because of rabbits. Then the scrub, you obviously couldn't clear it. It went under heritage. The problem then was obviously keeping the livestock out. So under heritage, we managed to get in contact with people and actually got it fenced to keep stock out, which made it far easier for stuff to rejuvenate without stock.

Then with the advent of the local landcare group and heritage or bush management advisors helping us, we were actually able to source grants to help finance rabbit poison bait running and rabbit ripping. Once we controlled the rabbits, we started to see a lot of new plants rejuvenate, like start to grow.

...the Bush Management Advisor is helpful; having him around to help with some of the paperwork, and Murray Mallee LAP has been helpful. They've just given ... advice and allowed me to go to courses.

I think what we're noticing now as well with the landcare group, Bush Management Advisors, whatever, involved with us, we're actually getting out to look at other people's properties to see what they're doing, seeing what is working, what isn't working. By having a group, it's got people together and tackling issues at the same time. Instead of going out and tackling issues as an individual, you actually do it as a group over the whole community, like, over thousands of acres and not just one farm—getting everyone actively involved, or as many people as we can. Also having a group where [the Bush Management Advisor] organises guest speakers on various different topics. Most of them are like your fire management plan, someone that can talk about that; your bird surveys. Bird population surveys, that type of thing. Plants and biodiversity.

Participant

- It provides a farmer perspective which highlights observed and experienced changes in native vegetation health since the 1960s.
- It demonstrates the importance of fencing native vegetation for protection and the need of financial support for fencing because the private benefit is low.
- It discusses the importance of local and accessible technical support for advice, help with paper work and organisation of landholder skill development opportunities.
- It highlights the benefit of community / group involvement for developing a landscape or 'regional' perspective of management issues and how to tackle them.
- It demonstrates an increase in knowledge and ownership of biodiversity management issues over time.
- It shows the important role played by local and accessible Bush Management Advisors and LAP personnel.

• It indicates that the increase in skills of land managers is evidence based.

Vignette #5: Overcoming resistance and changing attitudes

In my time, I think my involvement with landholder groups and getting them doing their land management in a coordinated manner has been a really big win. In some ways it's quite a small thing, but I think the win for the environment has been big. I was instrumental getting the Brown's Well Land Management Group together...

I was approached by a couple of landholders who were interested, and they were inspired by another one, the Mantung Maggae Land Management Group, which is one of the [groups] we've been involved with for a long time. Both of these groups are really important—they have a really strong community focus, which I think is inherently good for those people involved, because they can be quite isolated. It's important because it organises their [pest] control— and the main problems farmers face are rabbits and foxes, because rabbits eat their wheat, and foxes kill their lambs. ...So organising their fox and rabbit control, so that everybody does it at the same time, is really important because it's far more effective.

I spoke to them a lot, until in the end they were saying, 'All right, we'll, we've talked about it, are you going to call this meeting?' So they became proactive. ... I think the success of it was just having key landholders there who really conveyed the importance of this with their enthusiasm, let them talk about their conservation ideas, and it doesn't come as a lecture when it's coming from them.

I guess the most important thing was demonstrating the effectiveness of the method, and that is overcoming the resistance and the cynics, with providing incentive funding / subsidising... I poured money into that to begin with. I was paying half the price of baits and that to just encourage people to take them up, but not just get them for free. If they got them for free, they'd expect it for free next time. If they get them subsidised, they'd like it subsidised, but it isn't that big a jump. So to begin with, that was the incentive, to get people in. Got them to try the bait, found that things worked, and then the landholders sharing their experiences...

Now I just sit in the background, I cook a feed when I have a meeting... and say, all right, we're baiting; then we're ripping, and this is what's happening. We're going to have a bulldozer; everyone shares it, so it's more efficient... everybody hangs about, chats, and it makes a bit of a community, and that's important, that people have come not for a dry old meeting ... If I leave, that will keep going, and that's a great thing. I don't want anything that's dependent on my existence...

But what they've found is by getting everyone doing it together, it means the ones that aren't doing it have more peer group pressure applied. Even landholders, and some of them have taken two years to slowly come around, who were completely cynical and said this doesn't work, they've come around one by one. And it's impossible to win them over—if you'd spoken to them individually, they'd never change— [But] seeing it works, and seeing a group of landholders doing it and to consistently get results, there's something about the group that makes people question their own opinions. ...

I think the Brown's Well [Land Care] Group [is important]... because we're starting to see [change]. ... we're getting the results. ... the fox numbers are down, the rabbit numbers are down, and the numbers of Malleefowl just seem to be booming.

Well, it's important because it will be self-sustaining, but it's also important because it's implementing landscape scale conservation, and it seems to be working. We do need examples of where this can be done by landholders, and essentially on their own motivation, and they understand the reasons for happening. So it's a real grassroots thing. Other programs that work on a landscape scale ... just a massive aerial baiting program, and as soon as the money runs out, it stops, whereas this one, it's a cultural change, and I guess that's the important thing.

Strategic Informant

This vignette was considered significant by the participants at the summit workshop for the following reasons:

- It reports on the process of initiating a land management group, the importance of facilitation of group establishment by an appropriate officer and the change in attitude that can result from group participation.
- It emphasises the importance of time and persistence in encouraging change.
- It highlights the importance of land manager ownership of a community land management group and the necessity to establish groups in a way that will be self perpetrating/self sustaining.
- It highlights the value of small financial incentives and subsidises to initiate some land management changes
- It demonstrates that engagement, information, education and financial support through the BMA have encouraged change in management.
- It demonstrates that the social aspects of participation in community groups cannot be underestimated as a mechanism for building confidence to change practice.
- It discusses the effectiveness of coordinated management activities like pest control for broad landscape scale conservation.

Vignette #6: This is all relating to the Malleefowl as far as I'm concerned

Undoubtedly the funding that we receive for rabbit and fox control is the biggest factor, there's no doubt about that. As farmers, we couldn't afford the hire of the big equipment that's needed because a lot of the area where rabbits are the biggest problem, not on my place but on others, is the rocky limestone country. ...you've got to rip the burrows. We do a rabbit baiting program, and that's followed up with ripping. We get funding for this ...round about \$10,000 a year—for the group. ...There's no question that [the funding] has been a big help. I do a lot myself with my tractor, but you're sort of limited, it's only a wheel tractor, and you're limited where you can go and what you can do. ...

... It's just one of those things that we have to do and keep doing every year. We can't sort of do everyone's property once a year. We don't try, as far as ripping is concerned, but we're all supposed to do our baiting regularly every year. But a lot of the holdings they've got are so huge now that it's a bit of a battle. They talk about driving around 100 kilometres attending to their fox baits and this sort of thing. ...It's such a lot of work. Of course, we get the baits for nothing, or the group pays for them, but that's all funding which we are provided with. ...

... [Advisors and Officers] come to meetings whenever they can, and the timing of these sort of things is all arranged mutually. ...But the rabbit baiting, that comes first as a rule... [Fox baiting is also] coordinated. Different time of the year. That's done to suit the lambing. [We have got financial support] for the baits. Our contribution is our own time, really, and running expenses. Well, the farmers ...with sheep, they recognise that it's working very well, yes, there's no question of that. ...We've more or less got [rabbits and foxes] under control. You can never eradicate them, because they'll come in from somewhere else. A fox apparently will travel 25 kilometres or something a night quite comfortably, so you can't stop them.

This is all relating to the Malleefowl. As far as I'm concerned, I suppose I wouldn't want to have rabbits all around eating the crop. If it was that bad, but no, as far as I'm concerned, mainly it's because the rabbits will prevent revegetation of the plants which Malleefowl feed off. That's one of the important things.

I suppose it was the environment department providing us with funding. In fact, that's how we got together as a group. ...I think the Mantung Maggae Land Management Group is still looked upon as being one of the best examples of farmers working together for pest control.

Participant

- It emphasises that managing rabbits and foxes has multiple benefits farming operations and protects biodiversity.
- It illustrates that recovery of iconic species like Malleefowl can be a rallying point for community action and pest control.

- It recognises that the management challenges are substantial and ongoing but that long-term commitments have been made.
- It proudly mentions that the land management group is a good example of farmers working together.
- It highlights the importance of financial subsidies for pest control, and the cost-effectiveness of operating through a community group at the right economy of scale (the landscape or district scale).
- It shows that the land management group is self-sustaining but that they benefit from connections to advisors, officers and information and learning networks.

Vignette #7: Better lambing and help for ground nesting birds

...Brown's Well area decided to basically start a fox and rabbit management control in our area, with the help of the BMA and Murray Mallee LAP Officer... So that's basically how it started. From there we formed a committee or a group, and I'm Chairman and [another landholder] is Secretary, and from starting in a small scale, probably eight to 10, now we've got more and more farmers involved—not so much with perhaps our meetings and that, but in getting what we're trying to achieve, which is a fox and rabbit control baiting program throughout, and doing it all at the same time. So that's what our main aim was, and we're slowly getting there. There are some farmers that are still not on board, but we're working our way to achieving that as well. ...We're slowly getting more and more people on board, and that's quite pleasing.

My simple thing was that I've got Malleefowl on my place, and in the middle of the day the foxes were stalking them, so the first 12 months I'd baited on my own program. I think I used close to 500 baits in the 3-month period. So I knew there were a lot of foxes out there, and I knew I couldn't do it on my own, so it was basically to get other landholders where they would have the advantage of baiting foxes and receiving better lambing percentages, and at the same time it would also help ground nesting birds and stuff like that that we see in the Mallee.

Well, the changes that we've seen and reports that have come in are lambing rates are up... As far as Malleefowl is concerned, three to five years ago if I'd seen a couple of Malleefowl in 12 months, I would be lucky. This year I've seen up to 30 in one night, and that's just in two years. Okay, just on my place alone I've lost over 1,000 baits in two-and-a-half years, so I believe somewhere along the line you can see the benefit that's happened. Visually you can see—just on my own place I've seen a lot more ground nesting birds...we're just seeing lots more. ... I guess the same with an echidna; we see them quite regularly at the moment, and if we saw one echidna in 12 months, two years, maybe three years, we'd be very lucky, and in the last 12 to 18 months, I've never seen so many echidnas, which is another string to the biodiversity that's evolved.

... I'm going to do a 12-month baiting period this year and just see what the results are—I don't know whether I can—I guess the next thing will be to see whether I can see the chicks running around; that's my next aim. I've found 10 active nests on my place, and I've found new nests which have only been started up this last year, old nests that have been dug out to revamp and restart. It's very fascinating. ...

One thing that probably has happened is I've concentrated on the foxes and I reckon that probably the rabbits are a bit of a problem, because they've got no predators now. ...But there's certainly been a build-up of rabbits, or whether it's got immune to the calicivirus or what, we don't know. But they've come back thick and fast. That's just another problem we've got to try and overcome and handle.

It's certainly been a challenge, but it's also been very rewarding. ...

Participant

- It links pest management activities to observed and reported biodiversity outcomes.
- It provides a rewarding personal account of change in biodiversity and increasing fascination with the natural values of the land.
- It highlights the value of landcare groups and recognises the sense in allowing community members to participate in the ways most appropriate for them.
- It highlights the importance of a coordinated approach to landscape scale issues.

- It reports an increase in sightings of species impacted by pest animals (e.g. increases in Malleefowl and echidna sightings).
- It reports on the proactive approach of the group in attracting new land managers.
- It highlights understanding of the need for integrated pest management.

Vignette #8: Get some integration happening

This is the story of fire management and Mallee Emu-wren. It is set in Ngarkat Conservation Park which is a large reserve south of Lameroo and Pinnaroo, so it's about 270,000 hectares, I believe. It's now the most important area for Mallee Emu-wrens in South Australia; it might even be the only area where they still exist in this State. The thing about Ngarkat is it has a very colourful fire history. It's prone to very large fires, quite intense, because they happen during summer caused by lightning storms, and particularly over the last decade, there have been some very large fires and quite frequent as well. So most of the park has been burnt at least once in the last 10 years. That's not ideal, particularly for certain species, because it results in large areas of habitat being lost temporarily, and it takes much longer to recolonise a large burnt patch than a small one. Because the birds have to get right into the middle, and it also results in less source populations around the burnt patch, because of the fire history.

So basically the place was a mess, and when we started working on Mallee Emu-wrens in 2005 there were five sites in Ngarkat which you could call local populations, mainly isolated by other fire scars. We estimated the total population of sites then to be around 200 to 300 birds, so pretty small, really. ... Three of those were significant sites, and two were fairly small numbers – maybe 10 birds or something like that. Within one year of our starting work there, a large fire in 2006 wiped out two of the three largest groups, and we then estimated the population to be around 100 birds. That was when we knew fairly well straight away that we really needed to do something in the way of fire management to protect the remaining birds.

So we worked with the DEH fire management group in the region... and we came up with a plan to put in some strategic prescribed burns which would afford some protection for the remaining birds. So we helped them design those. They were done across 2006 and 2007, quite recently. ... So we helped design them and the crews figured out how to implement them safely, because some of them were actually within the population area. So what we did was we put one really large—I think it was 10 kilometres or so—strip burn to the south-west of the population area, because that's where we know the fires come from. That was a credit to the people in the region that knew about the fire behaviour in the region that we could make that decision. Then, within the actual population area, we put a bunch of just little strip burns to protect particular pockets. So that's all in place now, and it's just a matter of sitting back and watching them.

There has actually been one bushfire in that area since we put those fire breaks in, and it was stopped at one of the breaks so that was encouraging. To be honest, in the terrible conditions like we've had for some of the other fires... the breaks won't work as we hope they will, but with any luck there'll be still some pockets left unburnt in there. Things like the temperature and the wind speed and the fuel load, humidity. A lot of the fires we've had over the last few summers have just been a culmination of the worst possible conditions. So you get fires that start in a normal way, but then the wind changes and they turn around and they burn everything that they've left behind, and you just end up with these massive patches that are totally burnt out, which is exactly what we try to avoid with our fire management now. But with any luck, those breaks will work and the birds will be protected for a little while.

Another component to fire management for Mallee Emu-wrens in that region is that we're starting to look at patches of habitats that haven't been recolonised yet since they were burnt. So [the patches] are... approaching 10 years of age—so the habitat is starting to become suitable again. We're looking at trying to protect that and break it up a bit before it gets recolonised so that it will already be protected by the time the birds move back in. That way, you can kind of get ahead of the game a bit rather than always struggling, 'Oh no, what's going to happen next time there's a fire?' So that's the aim, I think, to be prepared and be ahead with this sort of thing.

[It is important] because the species are so close to extinction in our state. There is still, from what we understand, reasonably healthy populations in Victoria, although they haven't been surveyed recently, but the species exists over such a small range, with birds just confined to the Mallee south of the Murray, and the declines

that we've seen have just been kind of scary, really, to see that a species could just disappear that quickly. I think everyone really felt that we just wanted to do what we could for them. It was just good to work with the fire guys, and get some integration happening in the region.

Well, the creation of the threatened Mallee birds project, because nothing would have happened without that. They wouldn't even have known whether there were still birds in the park. The existence of the fire management program and... knowing fire behaviours in the region, and also knowing how to implement prescribed burns in different ways. And just integrating those two projects and really working together ... to achieve some common goals. ... I think we just arrived on the right combination of people to get that happening.

Strategic Informant

This vignette was considered significant by the participants at the summit workshop for the following reasons:

- It highlights the importance of partnerships, bringing different expertise sets together to address complex problems, and the need for coordinated management.
- It demonstrates that good knowledge underpins and directs conservation actions on the ground.
- It demonstrated how high priority conservation issues are being addressed.
- It illustrates the proactive and strategic land management approach being taken and the incorporation of knowledge gained into ongoing planning and action.
- It endorses the importance of the threatened Mallee bird project.
- It highlights the dire situation faced by the Mallee Emu-wren.

Vignette #9: Partnerships enabling community action

I think probably the biggest change is the change in perspective of the department, because it has ramifications for all threatened species, not just Regent Parrots. ...with National Parks, they've got their friends of parks groups which do a lot of work, but a lot of our biodiversity is located outside of national parks and on private property. So I think the concept that you can work with a community group to get a good outcome has been good. I think that's one of the biggest things that can have far reaching implications for other threatened species and other ecological communities and things like that. So I think that one is probably the most important.

... Initially I felt there was a lot of hesitation or not a clear idea of what could be achieved by a community group within department staff. ..They were happy to give out information, but there wasn't a willingness to work together. That might have been related to resources or something like that, I don't know, or concern about limited resources... I don't think they were really used to working with community groups, whereas in my role here at work, I do it all the time. So I'm aware of what you can achieve. So it took a long time to convince them that we could do something. So that's why it took so long to get the [Hogwash Bend / Regent Parrot] project happening and ideas happening and something happening on the ground. But now they're really enthusiastic about it. We get a lot of DEH staff visiting the site and a lot of conversations about it with executive members of the DEH, lots of publicity. We've managed to get a partnership with the Nature Foundation to provide water for the site. Once we started, it just all fit together. We were able to coordinate things on their behalf in terms of getting volunteers on site, looking after volunteers. They could provide us with the technical expertise and recommendations about what we should and shouldn't be doing. But then a lot of the hands-on work could be done by the community group. So I think that they saw a lot of opportunities in that that they hadn't maybe recognised before, which was really good.

Persistence, I think, and the fact that I work so closely with them [has enabled this change to happen] — in the same building, on a day-to-day basis, so the conversation didn't go away, whereas if I was sort of a community member out calling every once in a while, it may not have happened... The fact that you can come and say, 'We were out at Hogwash on the weekend and this is what we saw', or 'We had a call from a landholder and they had a question', so you're engaging them constantly and they start to realise, 'Oh, you're probably serious about this project, and you are wanting to do something', rather than just a phone call every once in a while.

... I think it's been fantastic for the threatened species itself and that in itself is evident but I think the fact that it might change the mindset of the way the department works is really positive. Yeah, so once you have a few

partners, it sort of builds on and builds on, and the DEH ecologists add credibility to that project because it's based on up to date science.

Strategic Informant

- It highlights the importance of partnerships, bringing expertise together and coordinating management within and between departments and community groups.
- It illustrates the real or perceived risks of 'impersonal' departments and authority groups.
- It suggests that the project has changed the mindset of members of government departments.
- It reports that the project has resulted in long term relationships being forged between groups which did not previously cooperate.

Section 4: Findings and implications

Key achievements and benefits

The following points are summaries of the project achievements and were generated by participants at the evaluation summit workshop. The findings are based on participants' analysis of multiple lines of evidence presented at the summit. The type and level of achievements and benefits varied between projects due to the diverse range of projects and delivery approaches and agents. In some cases, a highlight achievement in one project was a weakness in another project. Hence, achievements are listed where best practice was achieved in one or more projects and limitations are noted where one or more projects produced sub-optimal results or could be improved.

1. Improvements to sustainable farm practice

There have been improvements in land condition due to changes in farming practices (e.g. local improvements in soil erosion). There is a general commitment by land managers to increase the sustainability of farm practices, which can result in improvements to both productivity and biodiversity. For example, a benefit of the financial support given to land mangers to coordinate their pest control has ramifications for improvements in farm productivity as well as for biodiversity.

Reduction in erosion risk has occurred through improved land condition by the establishment of quality assured, incentive program for drought lots. The drought lot project has been a catalyst for change that has led to reductions in land degradation and increases in production. There has also been an unexpected benefit from drought lots—improving resilience of the livestock and being able to maintain breeding stock and stock numbers. The drought lot project fills a gap / targets livestock enterprises, where the focus had previously been on improving land management in cropping enterprises.

2. Improvements to biodiversity

There have been improved biodiversity management practices as a result of the projects. For example, fire management practices have improved to reduce the risk that threatened mallee bird populations will be lost due to unmanaged wildfire. There have been localised improvements in the condition and management of native vegetation and threatened species habitat including reduced threat from grazing impacts and invasive species. The projects have resulted in reduced distribution and impact of pest animals (including rabbits) and weeds (including Weeds of National Significance: WONS). As a consequence of projects included in the evaluation, over 1.2 million ha are managed to reduce critical threats, including over 2,000 ha supported to implement 10 year comprehensive management agreements through the BushBids project.

3. Landscape scale considerations

There has been some implementation of programs with consideration of outcomes at the landscape scale. For example, coordinated management of pest control has resulted in landscape scale improvements. Planning and investment in some projects has included spatial prioritisation for landscape scale outcomes.

4. Good engagement and partnerships

There has been a strong recurring theme within all the projects about the positive engagement and partnerships with individuals and groups. Good engagement and partnerships have developed between diverse community groups, organisations and individuals (e.g. land managers, consultants, government agencies, LAP groups, CFS, and community members) with benefits for agreement and organisation of projects improving land and ecosystem health. Partnerships created or extended through these projects have enabled different types of expertise to be brought into project planning and implementation.



Figure 6. A BushBids site in the Eastern Mount Lofty Ranges (photo provided by Patrick O'Connor)

5. Good communications

Projects demonstrated excellent ability to collate and disseminate information about project intentions and requirements for participation. Project communications (e.g. face-to-face interactions, meetings, presentations, newsletters) have provided a knowledgeable, trusted and responsive connection point for land managers to inform and be informed about relevant issues, concerns and opportunities.

6. Increased land manager awareness, skills and knowledge

Overall the projects have provided support and/or assistance to land managers who otherwise may not have had the capacity to improve land management practices. There has been strong support given to land managers to manage biodiversity through the BMA project: primarily technical and financial support. In general, land managers have improved awareness, knowledge and skills through participation in the sustainable farm practice and biodiversity projects, and the wider community has increased their awareness of threats to biodiversity. The projects have provided a spring-board (or leverage) in the community (local and broader) to share knowledge and work together to manage threats. Knowledge and skills provided with financial incentives have made it feasible to implement preferred management options and limit mistakes.

7. Monitoring

Evidence of improvements to land and biodiversity as a result of these projects is very valuable but some projects have not been designed to demonstrate quantitative change in the condition of the natural resource. The BushBids biodiversity conservation project provides an example of how monitoring is being carried out to show change over time through appropriate management intervention.

8. Good knowledge base

Greater knowledge and understanding has resulted from the studies of threatened birds and threatened flora: distribution, ecology and threats of target species. Substantial levels of investment into collecting baseline information and answering critical research questions have resulted in strategic decision making (e.g. fire management in Ngarkat and Regent Parrot conservation research at Hogwash Bend). Strategic and proactive management rather than reactive management has resulted from the improved knowledge base (e.g. fire

management plans to protect threatened mallee birds and drought lots to protect land from soil erosion), increasing the chances of success and leading to greater value-for-money in on-ground investments.

9. Diversity of approaches

There has been a diversity of approaches that have been used in and between the evaluated projects. For example, the threatened species projects have taken a more species focussed approach while the BMA project has taken a broader landscape scale and risk reduction focussed approach. These different approaches have dovetailed together to produce project results which are more than the sum of achievements from individual projects.



Figure 7. Control burning in Ngarkat Conservation Park (photo provided by Ben Kaethner)

Key issues impacting on project outcomes

During the evaluation summit workshop, participants were asked to list what they saw as the major issues for the projects. The summit participants felt that the most significant issues, existed within ten themes as detailed below. The type and level of achievements and benefits varied between projects due to the diverse range of projects and delivery approaches and agents. In some cases, a highlight achievement in one project was not achieved in another project. Hence, issues impacting project success are listed below where one or more projects produced sub-optimal results or could be improved in future if issues are addressed.

1. Drought conditions are impacting on biodiversity and agriculture

Drought conditions have impacted both biodiversity and agriculture in the region. The level and measurability of success has been affected by drought conditions. Some desirable outcomes have not been able to be achieved due to restrictions on water allocations.

2. Lack of engagement and communications

Some projects had difficulty engaging land managers and community members in new projects when project lead times were short or the prior relationship building efforts had not been made. This difficulty was exacerbated when there were difficulties in getting the participation of key agency staff and when there was confusion about different organisations, their roles and what they provide (e.g. land managers may not distinguish between NRM officers, LAP project officers and DEH staff).

Engagement was also limited where potential participants had financial or time constraints which were not addressed by the programs or when communications approaches were not appropriate (e.g. when people are 'workshopped out' other methods of communication are required). Some projects also had difficulty engaging non-active absentee land managers in some parts of the region.

There is a general lack of targeted youth communication products and approaches in the region.

3. Lack of monitoring

There is a lack of long-term monitoring to demonstrate progress towards long-term targets and to provide management feedback. This is influenced by project drivers arising from short term funding cycles and by a lack of appropriate methods for cost-effective monitoring that is meaningful and useful for adaptive management. Appropriate methods and expertise for monitoring complex systems and outcomes from some interventions (e.g. biodiversity outcomes from land management) are not always available. Monitoring is also limited by inappropriate reporting systems and data management arrangements for some types of projects.

Projects often adopt prescribed management approaches to decrease compliance risk and keep management information simple at the expense of flexibility for adaptive management and opportunistic action.

4. Lack of compliance

A great deal of extension work undertaken by some projects has not been followed up with appropriate compliance monitoring.

5. Insufficient resource allocation for threatened flora recovery

The level of investment in threatened flora recovery was substantially below that made in threatened fauna recovery research and management projects. Investment in threatened flora recovery in the final years of the evaluation period did not match the resources required to adequately implement the recovery plans.

6. Lack of support and insecure resourcing

Projects should be supported to the levels required to achieve specified outcomes. Funding below the required levels can often produce transient and unsatisfactory gains. Resources need to be adequate across the range of interconnected biodiversity outcomes sought. Biodiversity projects need time to achieve measurable outcomes.

Funding cuts and short term funding cycles present challenges for maintaining continuity in staff and threat management and recovery actions.

Some projects were limited in their achievements due to a lack of assistance to landowners with native vegetation that has not been placed under covenant.

Some projects used landholder assistance models which did not achieve full cost-effectiveness because investments did not reflect the public:private benefit sharing between the program and individual land managers.

7. Inappropriate timeframes

Land managers report that the response times for some projects and processes (e.g. Heritage Agreement applications) are too long and discourage participation. A lack of project alignment within and between organisations can make it difficult for land managers to participate with projects at the times required.

8. Lack of landscape approach

Some projects focussed primarily on private land when some opportunities could have been realised if National Parks and Wildlife Reserves land was eligible for participation in the same schemes.

Projects achieving good results at the individual property level were sometimes still sub-optimal because landscape scale adoption of appropriate management actions did not occur.

9. Lack of advocacy training

Community engagement in natural resource management included adequate advocacy training to support community members to advocate/promote their cause and funds for important works.

10. Diversity of skills required

Many of the projects require a diversity of skills and expertise for implementation. Although this issue was not seen as having limited the projects' achievements to date, it was raised to highlight potential challenges in the future.

Suggestions for future program improvement

ONE: Improve land manager monitoring of project progress and achievement	 Implement appropriate methods for land managers to monitor changes on their property e.g. for Drought Lots (photo points, vegetation cover assessments). Appropriate monitoring tools are those which engage land managers and provide valid feedback on their management actions without requiring unreasonably large amounts of training or data collection and analysis time. Improve systems for reporting on activities and change monitoring to streamline evaluations.
TWO: Improve engagement and communications, including optimising the use of champions	 Develop and use processes which value and facilitate the actions and achievements of local champions to engage land managers who have not traditionally participated in land and biodiversity management projects. Focus communication on both reaching and engaging non-participants and on informing current participants. Coordinate the efforts of different agencies to avoid confusion about delivery responsibilities and present consistency to participants. Improve reporting and celebration of project achievements. Develop education programs with schools to expand communication of project rationale and achievements to the community and future generations of land managers.
THREE: Keep the strong technical support	 Maintain strong technical support from programs and adequate, accessible (paid) coordinators to facilitate technical knowledge and skill transfer. Ensure technical support is an adequate component of projects which require it for success and do not implement projects where required technical support is lacking.

FOUR: Improve land manager compliance	• Improve enforcement provisions in the Natural Resources Management ACT (2004) (and related ACTs) to facilitate greater compliance with obligations and underpin compliance in funded projects.
	 Design land manager contracts with compliance in mind and ensure compliance provisions are explicit and understood.
	 Develop and implement compliance procedures for projects which do not currently have clear guidelines and templates.
FIVE: Improve resource	• Improve understanding in the NRM community that threatened flora and fauna recovery can be integrated into landscape restoration approaches.
allocation and integration of projects	 Improve integration of project implementation, especially between agencies and organisations working in the same sub-regions.
SIX: Keep the diversity of approaches	• Select the right project types for different objectives and maintain the diversity of approaches (including financial incentives; funds available for implementation; planning and research) necessary to achieve multiple and synergistic results from investment in diverse objectives.
SEVEN: Improve incentives to match public benefits	 All projects should be able to demonstrate cost-effectiveness and should be designed to engage land managers who can provide value-for-money management of priority natural resource assets.
EIGHT: Improve landscape scale, regional approaches	Landscape scale problems should adopt landscape-scale approaches to achieve best results.
NINE:	Match levels and security of funding to project priorities and targets
Improve funding security for long-term outcomes	 Increase funding and security of funding for threatened flora recovery projects
term vateomes	 Reliable funding sources to ensure maintenance of skill base, technical support systems and engagement levels with land managers and other stakeholders.
	 Promote the use of project investment models which seek cost-effectiveness through cost sharing between the projects and individual land managers.
	 Influence funding bodies to improve the timeframes for funding to better match project requirements not funding body requirements.
	• Clarify which projects require continuity of funding and which have short term endpoints.

Section 5: Index

Sustainable farm practice index

Chart ref#	Evidence type	Authenticity	Author or custodian	Reference
1	Report	Progress report to funding body	SA MDB NRM Board	Complementary State NRM Program, Financial-Progress Report as of 28 February 2009 Project number: CSP084739, SA MD Drought Lot Program
2	Booklet	Training materials	Rural Directions and Productive Nutrition	Stock Containment Workshop Booklet, Rural Directions and Productive Nutrition
3	Participant feedback	Workshop evaluation forms	Rural Directions	Survey forms from Stock Containment Workshop, Loxton
4	Information Sheet	Project communication material	SA MDB NRM Board	SA MDB NRM Board Drought Lot Program Information Sheet
5	Newsletter article	NRM Newsletter	MMLAP Association Inc.	Mallee Update (2008) Volume 10, Issue 1. Drought Lot Assistance p 5
6	Report	Project report to funding body	SA MDB NRM Board	Investment strategy project final report: Support communities to improve land and water management practices to reduce impacts on catchment natural resources (31 Dec 06) ISMDBP Prog 4
7	Flyer	Project communication material	Rural Solutions / SA MDB NRM Board	Flyer promoting whole farm planning
8	Report	Reviewed by public consultation author=publisher	SA MDB NRM Board	SAMDB NRM Board (2008) SAMDB NRM Board Regional NRM Plan vol 2 State of the Region Report.
9	Report	Internal review	Rural Solutions	Ridgway, K. Whole farm planning Program Review
10	Project Briefs	Project communication material	SA MDB NRM Board	Whole farm Planning project briefs (Eudunda, soil loss, salinity, reduce recharge)
11	Report	NRM Board Annual Report	SA MDB NRM Board	SA Murray-Darling Basin NRM Board Annual Report 1 July 2007 – 30 June 2008 http://www.dwlbc.sa.gov.au/assets/files/SAMDBNRM_AnnualReport_20070 8.pdf
12	Report	Project report	Rural Directions	SA MDB NRM Board: Review of 10 Whole Farm Plans (Oct 2008) Rural Directions
13	Report	Project report	Rural Directions	Craddock, T. (2008) SA MDB NRM Board Whole Farm Planning Project: Coomandook Group – Termination Report. Rural Directions.
14	Report	Progress report to funding body	SA MDB NRM Board	Caring for our Country progress and financial report for the period ending 31 Dec, 2008. Coastal Environments and critical aquatic habitats. Commonwealth identification no. 69058
15	Report	NRM Tracker report	SA MDB NRM Board	ISMDB053919C-07 Prog Mar 09.snp: 07/08 funding
16	Report	NRM Tracker report	SA MDB NRM Board	ISMDB053919C-06 Prog Mar 09.snp: 06/07 funding
17	Report	NRM Tracker report	SA MDB NRM Board	ISMDB053919 Final Sep 07 (revised).snp: 05/06 funding
18	Report	Research results summary	DWLBC	Protection of agricultural land against erosion in the SA Murray-Darling Basin Region. Seasonal Report April 2009. http://www.dwlbc.sa.gov.au/assets/files/LBS_SAMDBRegProtectionRptApr0 9.pdf
19	Report	Forum paper	DWLBC	Forward, G (2008) Key Results of DWLBC Land Manager Surveys 2000 – 2008: Forum Paper Waite 26 November 2008
20	Report	Research results summary	DWLBC	Forward, G (2008) Soil Erosion Risk/Protection on agricultural land in the SAMDB NRM Region. Summary of data from the Field Survey Program, DWLBC Land Condition Monitoring Program, for the SAMDB NRM Board Target Setting Workshop 28 March 2008.
21	Strategic Informant narrative	Strategic informant interview	O'Connor NRM	Bernadette Lawson interview (Project Manager SAMDB NRM Board)
22	Participant narrative	Participant interviews	O'Connor NRM	Project participant interviews 2009 for SAMDB PSR
23	Report	Progress report to funding body	SA MDB NRM Board	Progress and Financial Report for the Period Ending 30 June 2009. Coastal and Critical Aquatic Habitats. Commonwealth Identification: 69058. Regional Investment 2008-09

Biodiversity index

Chart ref#	Evidence type	Authenticity	Author or custodian	Reference
1	Final Report	Report to funding body	Sonia Dominelli DEH, SAMDB NRM	Investment Strategy Project Final Report – Phase 2 (2004-2005) Habitat protection and recovery to improve biodiversity and protect areas of Conservation significance (All) Phase 2
2	Final Report	Report to funding body	Sonia Dominelli DEH, SAMDB NRM	Investment Strategy/Activity Final Report 2005-06– A9.1 (BMA) Phase 3
3	Final Report	Report to funding body	Sonia Dominelli DEH, SA MDB NRM	Investment Strategy/Activity Final Report 2005-06– A9.2 (TMB/RP) Phase 3
4	Report	Report to funding body	Sonia Dominelli DEH, SAMDB NRM	A9.1 ISMDB053926 Summary of Achievements 2005-2006 (BMA)
5	Final Report	Report to funding body	Sonia Dominelli DEH, SAMDB NRM	Investment Strategy/Activity Final Report 2006-07– A9.1 (BMA) Phase 4
6	Report	Report to funding body	Sonia Dominelli DEH, SAMDB NRM	A9.2 ISMDB043768 Summary of Achievements 2005-2006 (TMB/RP)
7	Final Report	Report to funding body	Peter Cale, DEH, SAMDB NRM	Investment Strategy/Activity Final Report 2006-07– A9.2 (TMB/RP) Phase 4
8	Report	Report to funding body	Sonia Dominelli DEH, SAMDB NRM	A9.2 Summary of Achievements 2006-2007 (TMA and RP)
9	Final Report	Report to funding body	Claire Treilibs DEH, SAMDB NRM	Investment Strategy/Activity Final Report 2007-08 – A9.1 (BMA) Phase 5
10	Financial Acquittal	Report to funding body	Claire Treilibs DEH, SAMDB NRM	NRM Project Financial Acquittal Certificate 2007-2008 A9.1
11	Final Report	Report to funding body	Claire Treilibs DEH, SAMDB NRM	Investment Strategy/Activity Final Report 2007-08 – A9.2 (TB/RP) Phase 5
12	Financial Acquittal	Report to funding body	Claire Treilibs DEH, SAMDB NRM	NRM Project Financial Acquittal Certificate 2007-2008 A9.2
13	Caring for our Country quarterly activity report	Report to funding body	Claire Treilibs DEH, SAMDB NRM	Caring For Our Country - Quarterly Activity Report - Protection and Restoration of Habitats in the SA MDB
14	Caring for our Country Progress and Financial Report	Report to funding body	Claire Treilibs DEH, SAMDB NRM	Caring For Our Country – Progress and Financial Report for the Period ending 30 June 2009. Biodiversity and Natural Icons. No. 69056. Regional Investments 2008-09
15	Report	DEH MPRT	Sonia Dominelli, DEH	Nature Conservation Program (NCP) Management Planning and Reporting Tool (MPRT) Report for 2007/2008 3rd quarter, March 2008
16	Report	DEH MPRT	Sonia Dominelli, DEH	Nature Conservation Program (NCP) Management Planning and Reporting Tool (MPRT) Report for 2008/2009 3rd quarter, March 2009
17	Strategic informant narrative	Interview	O'Connor NRM	Chris Grant (2009) Bush Management Advisor
18	Strategic informant narrative	Interview	O'Connor NRM	Claire Treilibs (2009) Regent Parrot
19	Strategic informant narrative	Interview	O'Connor NRM	Renee Thompson (2009) Regent Parrot
20	Strategic informant narrative	Interview and email response	O'Connor NRM	Leanne Mladovan (2009) Threatened Mallee Birds
21	Report	Report to funding body	K Smith, DEH	Smith, K. 2004. Regent Parrot Nest Survey 2003 – 2004: A Report on Regent Parrot Nest Sites in the S.A. Section of the Murray-Darling Basin. Unpublished Report for the South Australiar Threatened Species Network.
22	Report	Report to funding body	K Smith, DEH	Smith, K.W. 2006. The Regent Parrot <i>Polytelis anthopeplus monarchoides</i> : A Survey of Selected Nesting Sites in South Australia in the 2006 Breeding Season. A Report Prepared for the Wildlife Advisory Committee SANPW Council.
23	Recovery Plan	Threatened Species Recovery Plan	M Schultz, DEH	Schultz, M.A. (2006) Recovery Plan for the Regent Parrot (eastern subspecies) <i>Polytelis anthopeplus monarchoides</i> in the South Australian Murray Darling Basin Department for Environment and Heritage Adelaide, South Australia.
24	Caring for our Country Progress and Financial Report	Report to funding body	Claire Treilibs DEH, SAMDB NRM	Caring For Our Country – Progress and Financial Report for the Period ending 31 Dec 2008. Biodiversity and Natural Icons. No. 69056. Regional Investments 2008-09

25	Review report	DEH internal review	P Cale and C Treilibs, DEH	Cale, P. and Treilibs, C. (2008) Review of the Threatened River Corridor Fauna Recovery program. Report for the SAMDB Natural Resources Management Board, Department for Environment and Heritage, Berri, SA.
26	Newsletter article	DEH newsletter	DEH	On the Road to Recovery, Landscapes, Special Edition, December 2008 http://www.environment.sa.gov.au/deh/pdfs/LandscapeSE 09.pdf
27	Review report	DEH internal review	P Cale and C Treilibs, DEH	Cale, P. and Mladovan, L. (2008) Review of the Threatened Mallee Bird Recovery program. Report for the SAMDB Natural Resources Management Board, Department for Environment and Heritage, Berri, SA.
28	Report	Report on research results	P Cale and C Treilibs, DEH	Cale, P. and Mladovan, L. (2007) The effect of altered grazing regimes on the composition of mallee bird assemblages in the rangelands: Report on Trial 2007. Report to SAMBD NRM Committee."
29	Report	Report to funding body	DEH Murraylands	Department for Environment and Heritage (2008) Final Report 2007-2008 Investment Strategy Threatened Fauna Recovery Programs, Department for Environment and Heritage, Berri, SA.
30	Report	Report to funding body	P Cale and C Treilibs, DEH	Cale, P. and Mladovan, L. (2008) Threatening Processes for Mallee Birds. Report for the SAMDB Natural Resources Management Board, Department for Environment and Heritage, Berri, SA.
32	Journal article	Ecology Letters	David Lindenmayer et al	David Lindenmayer et al (2008) 'A checklist for ecological management of landscapes for conservation in' <i>Ecology Letters</i> 11 78–91
33	Report	Progress/final report	DEH	Malleefowl consultants final report for each year
34	Case study	Case study prepared for National Land and Water Audit	DEH	Mallee Emu-wren Recovery Case Study for the National Land and Water Audit (2007)
35	Media release		DEH	Mallee Emu-wren Media release (September 2008)
36	Report	Monitoring results report	DEH	BEM Monitoring progress reports - Annual
37	Meeting minutes	MEW recovery workshop minutes	DEH	Emu-wren Recovery workshop Minutes May 2008
39	Newsletter article	DEH Newsletter	DEH	Murray Mallee Whistler – Nov 2008
40	Newsletter article	DEH Newsletter	DEH	On the Road to Recovery, Landscapes, Special Edition, December 2008 http://www.environment.sa.gov.au/deh/pdfs/LandscapeSE 09.pdf
41	Information sheet	Project communication material	P Cale and C Treilibs, DEH	Mladovan, L. and Cale, P. 2008. Species Profile: Striated Grasswren. Threatened Mallee Birds Series. Department for Environment and Heritage. Online:
42	Report	Internal report	DEH	Benchmark and Monitoring report (2004/05)
43	Report	Internal report	DEH	CARRS (Comprehensive, Adequate, Representative Reserve System) Strategy for SAMDB (2006)
44	Report	NCSSA	NCSSA and DEH	Bushland Condition Monitoring Manual: Murray Darling Basin South Australia. Volume 1: Field Guide to Bushland Monitoring (2005)
45	Report	Internal strategy	DEH	A vegetation strategy for the Murray Mallee towards a Habitat Restoration Strategy for the Murray Mallee (2005)
46	Guidelines	DEH produced guidelines	DEH	Best management principles for seed collection and storage (2005)
47	Report	Survey report	EBS/ DEH	EBS (2005) Roadside Vegetation Survey for Southern Mallee District Council
48	Booklet & database	Communication materials and database	DEH	Dieback in the SAMDB booklet, poster and datasheet (2005)
51	Report	DEH	DEH	Moritz, K. (2008) Bridal Creeper (<i>Asparagus asparagoides</i>)Plan of Action for the Southern Mallee District Council 2007 – 2010 Conservation Programs Unit Murraylands
52	Report	DEH	DEH	Geelen, L. (2006) DRAFT. Boneseed (<i>Chyrsanthemoides monilifera</i>) in the Halidon region of the South Australian Murray Darling Basin, Department for Environment and Heritage, South Australia'.

53	Information provided by agency staff	Email response	DEH	Maria Johns – DEH Heritage Agreements
54	Information provided	Email response	DEH	Robyn Storr – DEH Fencing Officer Heritage Agreements
55	by agency staff Information provided	Email response	DEH	Kath Carey – DEH Heritage Agreements
56	by agency staff Recovery Plan	Threatened Species Recovery Plan	Chris Obst /DEH	Obst, C. (2005) South Australian Murray-Darling Basin Threatened Flora Recovery Plan. Report to the Threatened Species and Committees Section, Australian Government Department of the Environment and Heritage, Canberra.
57	Report	Report to funding body	Chris Obst /DEH	Threatened Flora project annual summary report 05-06
58	Report	Report to funding body	Chris Obst /DEH	Threatened Flora project annual summary report 06-07
59	Report	Report to funding body	Chris Obst /DEH	Threatened Flora project report number 5 and 6 2006
60	Report	Report to funding body	Chris Obst /DEH	Threatened Flora project report 7, 8, 9 2007
61	Report	Report to funding body	Chris Obst /DEH	Threatened Flora project report 10, 11, 12 and 13 2008
62	Report	Report on monitoring results	Chris Obst, Environmental & Biodiversity Services / DEH	Phebalium Iowanense Monitoring Report. South Australian Murray-Darling Basin Threatened Flora Recovery Plan, May 2005
64	Information provided by agency staff	Email response	DEH	Doug Bickerton DEH Threatened Flora Ecologist
65	Report	Final report for program	O'Connor NRM	O'Connor P, Morgan A and Bond A (2008) BushBids: Biodiversity stewardship in the Eastern Mt Lofty Ranges, South Australia. South Australian Murray Darling Basin Natural Resources Management Board, South Australia
66	Report	Report on research results	O'Connor NRM	Morgan, A and O'Connor P (2008) Critical Land Manager and Service Provider Constraints to Conservation Tender Bid Development report to the SA Murray Darling Basin Natural Resources Management Board
67	Report	Report on research results	O'Connor NRM	O'Connor P.J., Bond A., Clarke K. and Milne T. (2008) Vegetation condition in the Eastern Mt Lofty Ranges: Baselines from the BushBids biodiversity stewardship program. Nature Conservation Society of South Australia Inc.
68	Report	Report on research results	O'Connor NRM	O'Connor P J and Milne T (2009) Detecting vegetation condition change in the Eastern Mt Lofty Ranges
69	Database	Internal database	O'Connor NRM	BushBids management plan database
70	Information provided by NRM Board staff	Email response	SAMDB NRM Board	BushBids audit results 2008 & 2009
71	Participant survey data	Evaluation study of participant experiences	O'Connor NRM	BushBids landholder survey data
72	Information provided by NRM Board staff	Email response	SAMDB NRM	Jem Tesoriero, Capacity Building Coordinator
73	Strategic informant narrative	Interview	O'Connor NRM	Chris Obst (previously Threatened Flora Project Officer)
74	Strategic informant narrative	Interview	O'Connor NRM	Tim Jury, Threatened Plant Action Group
75	Strategic informant narrative	Interview	O'Connor NRM	Peter Cale (previous Threatened Species ecologist)
76	Strategic informant narrative	Interview	O'Connor NRM	Nigel Willoughby, Habitat Restoration and Management Ecologist, DEH
77	Participant interviews	Interview	O'Connor NRM	Project participant interviews 2009 for SAMDB PSR
78	Strategic informant narrative	Interview	O'Connor NRM	Ben Kaethner, Fire Planning Officer DEH
79	Information provided by agency staff	Email response	DEH	Sonia Dominelli DEH

Section 6: Evaluation methodology

Process step 1: Planning workshop

The planning workshop was held in Mount Barker, and was attended SAMDB NRM Board staff and representatives from the Australian Government and SA Department of Water Land and Biodiversity Conservation. The attendance list is provided below. As SAMDB NRM Board and DEH staff members with direct involvement in the projects were unable to attend the planning workshop, they were invited to review the program logic models and evaluation questions afterwards. Feedback was received from Bernadette Lawson (Drought Lot and Whole Farm Planning Manager), and Chris Grant, Claire Treilibs and Leanne Mladovan (Biodiversity and Threatened Species Officers).

Name	Organisation		
Sarah Lance	Biodiversity Program Leader, SAMDB NRM Board		
Amy Lee	Monitoring & Evaluation Officer, SAMDB NRM Board		
Lucy Schapel	Monitoring & Evaluation Officer, SAMDB NRM Board		
Sarah Lewis	Senior Monitoring & Evaluation Officer, Department of Water, Land and		
	Biodiversity Conservation		
Damian Wrigley	Australian Government		
Gwynne Coughlin	Australian Government		

The aim of this workshop was to formulate a plan for the study by:

- providing a briefing about the intended process of the study
- clarifying the program logics for both the sustainable farm practice and biodiversity projects
- determining the key evaluation question
- identifying what data already existed
- determining which project officers, consultants, project managers and land managers should be consulted

Program logic helps to determine what change an organisation is attempting to achieve with delivery of a particular program or project. Program logic makes the links between project activities and intended outcomes explicit. This is essential to understanding what it actually is that we are evaluating. The program logic models that were created are shown in Figures 2 and 3.

Evaluation Questions form the basis of scoping out both the interviews and the data trawl steps. They are used as the 'organising construct' for many evaluation studies.

The key evaluation question for this study was:

"To what extent did the Australian Government investment in the SAMDB contribute to improving biodiversity, sustainable farm practice and community engagement outcomes, from 2004 to 2009?"

The following evaluation questions used to guide this study are based on the program logic model for the sustainable farm practice and biodiversity projects. Those listed here represent a sample of the more extensive set developed in the planning workshop.

Program Logic Level	Sample Evaluation Questions
LONGER TERM OUTCOMES	 To what extent has connectivity changed?
	 To what extent has condition of native ecosystems changed?
	 Has soil and land condition improved?
	 Has improved land management practice lead to improved condition?
INTERMEDIATE OUTCOMES -	 Do land managers now recognise/appreciate native wildlife?
(engagement and capacity,	How many land managers engaged?
aggregate change in protection and management,)	How many hectares have been fenced?

	How many covenants and how many hectares?
CHANGES AT THE LOCAL/SITE SCALE	 Have drought lots reduced the amount of wind erosion? Has the situation of priority sp. improved through those programs?
INFLUENCE ACTIVITIES	 How is technical information provided to land managers, which approaches/methods are used? Do workshops target the right land managers?
FOUNDATIONAL ACTIVITIES	 What communication materials were produced? (e.g. fact sheets) What research and monitoring has been conducted with what results? What plans were produced?

Process step 2: Data trawl approach

The hypothesis was that drought lots, whole farm planning, Bush Management Advisors, BushBids, threatened mallee birds, regent parrot and threatened flora projects have influenced (or were on track to potentially influence) sustainable farm practice and biodiversity in the SAMDB NRM region. This study therefore aimed to collate multiple lines of evidence to provide a coherent and plausible story about the influence of the projects on community engagement, land condition and biodiversity in the region.

The evaluation questions developed at the planning workshop were used to guide the collection and analysis of data. Potential data sources were identified by participants in the planning workshop, by the consultant team, and subsequently by informants consulted as part of the data trawl process. Information was obtained from published reports, internal reports, project documents and updates, and from the narratives and opinion of 7 expert or science informants. The opinion of experts was collected where published, quantitative information was not available. Data sources are documented in the index (Section 5) which aims to provide *transparent disclosure* of data sources, enabling independent evaluation of their reliability.

Data quality and relevance to the project topic were assessed. This included spatial and temporal coverage, data parameters collected, collection methodologies, externalities and data credibility. Summaries of the relevant information uncovered from the data trawl were placed into a draft results chart against the levels of the program logic model. Each piece of evidence placed in the results chart is referenced in the index (Section 5). After data had been collated and synthesised a 'cross check' was conducted with the qualitative evidence compiled from the social inquiry interviews.

Process step 3: Social inquiry process

Based on the key evaluation questions developed in the planning workshop, a participatory interview process with willing land managers and selected key informants was carried out by the consultants and participating NRM staff.

A modified version of the most-significant change technique (MSC) (Dart and Davies 2004^c) was used to frame the semi-structured interviews. The first four to five questions related to eliciting stories of significant change as viewed by the informants. The remaining questions were more specific and related to the questions posed from the planning workshop. This approach ensured that the interviews provided for in-depth discussion while still covering key points. While a preference was given for conducting face-to-face interviews, this was not possible in some instances. All interviews were recorded and partially transcribed.

The social inquiry process included the following steps:

- Training provided to SAMDB NRM and DWLBC staff who assisted with the interviews.
- 15 interviews were conducted with participants/land owners or land managers.
- 12 interviews were conducted with project or 'strategic' informants.
- Responses were transcribed, collated and analysed.

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^c Dart, J. J. & Davies R.J. (2003) A dialogical story-based evaluation tool: the most significant change technique, *American Journal of Evaluation* **24**, 137-155.

Conducting interviews with participants/land managers

Contact details for a total of 17 land managers /project participants where provided by the project staff and all these participants were invited to be interviewed. Two land managers declined to be interviewed because they were unavailable during the interview period.

The consultant team, with the help of NRM and DWLBC staff, conducted interviews with 15 land managers. Nine of these land managers were involved in Drought Lots and/or Whole Farm Planning, while six were involved in biodiversity work through the Bush Management Advisors and the Threatened Mallee Birds projects. Due to time and resource constraints, interview effort was focussed on these two inter-related biodiversity projects rather than being spread over all five biodiversity projects. This approach was taken to optimise the value of information collected through the interviews.

Conducting interviews with strategic informants

As well as getting the 'experiential' view of land managers participating in the projects, it is critical to understand the opinion of those with a strategic view of the projects' approach. Informants were drawn from the project staff, consultants, and Government Agencies, based on recommendations made at the planning workshop. In total 12 interviews were conducted with project or 'strategic' informants.

The number of interviews conducted with strategic or expert informants was:

Projects	No. informants interviewed
Threatened Mallee Bird	6
Bush Management Advisor	4
Regent Parrot	2
Threatened Flora	3
BushBids	0_{q}
Drought Lots / Whole Farm Planning	4

Collation of responses and preliminary analysis

The 'incidences of significant change' sections of the interviews were transcribed from the digital recording and then edited to provide one or more vignettes describing changes. Edits made to these stories were kept to a minimum but allowed for the addition of punctuation to clarify meaning and the deletion of material not directly relevant to the story (indicated by '...'). In a few incidences the order of paragraphs was rearranged to improve the flow of the narrative. A total of 27 vignettes were identified and presented at the evaluation summit workshop.

Information collected through the interview processes was collated and analysed for inclusion in the results chart, and was also used to identify key issues for the projects. The key issues were initially synthesised by the consultant team and presented at the summit workshop along with supporting quotes from the interviews.

Process step 4: Expert panel

Five expert informants attended the expert panel workshop on 3 June 2009. They were selected due to their expertise in land condition and sustainable farm practice; ecology and management of threatened species and communities and native vegetation condition. They were representatives of the SA Department for Environment and Heritage, the Department for Water, Land and Biodiversity Conservation and the University of Adelaide. Details of the members of the outcomes panel are provided in the following table.

 $^{^{\}rm d}$ As O'Connor NRM was the delivery agent for <code>BushBids</code>, no strategic informant interviews were conducted for this project to avoid potential bias.

Name	Organisation	Field of expertise/experience
Dr Nigel Willoughby	Habitat Management and Restoration Ecologist , SA Department for Environment & Heritage	 Landscape ecology Restoration planning Threatened species recovery Bird ecology and recovery planning
Dr Dan Rogers	Habitat Restoration Ecologist, SA Department for Environment & Heritage	 Restoration ecology Conservation planning Behavioural ecology Habitat assessment and monitoring
Prof Wayne Meyers	School of Earth and Environmental Sciences, University of Adelaide	 Irrigation crop water use Crop physiology Soil and land conservation and restoration Modelling systems for natural resource management
Mr Andrew Fisher	Principal Advisor, Landscape Management, Department of Water Land and Biodiversity Conservation	 Soil and land management Agricultural production systems Restoration ecology and planning Native vegetation management
Mr Jody Gates	Manager – NatureLinks / Conservation programs, Department for Environment & Heritage	 Biodiversity conservation planning and management Threatened species research and monitoring Restoration ecology Landscape ecology

The panel was presented with the draft results chart, which included the relevant secondary data resulting from the data trawl and the information collected through the informant interviews. The panel was then invited to analyse the data and develop statements concerning the historic, current and future trends in resource condition and the likely contribution of the projects to the resource condition outcomes. These statements are presented in the final rows of the results charts (Section 2).

Process step 5: Evaluation summit workshop

The Evaluation summit technique is a large group workshop process using a blend of Appreciative Inquiry and Most Significant Change technique. After an introductory session, a short presentation was made of the evaluation findings including an overview of the results chart. Participants were invited to analyse both the results chart and a series of first person narratives about practice and attitudinal change. The participants were then asked to identify the most significant outcomes from this process and document the reasons for their choices. Following this, participants were presented with 'key issues'; here the facilitator presented the key themes, and the participants provided comment to prioritise the issues and refine their definition. The refined achievements and issues are presented in Section 4 of this report. The nine vignettes representing the most significant change for workshop participants are presented in Section 3 of this report, along with the reasons why they were chosen.

An important aspect of the summit process is that it actively engages both agency staff and community in the actual analysis of the data. Because participants play an active role in forming the recommendations there is a much greater chance of ownership of the results, and thus that they will be implemented. In the afternoon of the same workshop, participants were invited to follow a number of steps that culminated in the creation and prioritisation of the draft recommendations.