



A community open day at Nilpena-Ediacara National Park was supported by North Flinders Landscape Group

# Achievements Report

## 2023-2024

*Leading the way to biodiverse and productive landscapes in a changing climate*

Each year the SA Arid Lands Landscape Board delivers projects and programs across its five key priority areas and we are pleased to feature some of its achievements for 2023-24.

The South Australian Arid Lands Landscape Board works across most of Outback SA and partners with community, industry, traditional owners and government agencies to ensure a sustainable approach is taken to manage, protect and restore soils, water, and native plants and animals.

The board works to ensure there is a balance between the needs of regional communities and the sustainable management of the environment.

It also operates as the relevant authority for a range of water, land protection and animal and plant control activities.

The board's work is funded through a collection of a land-based levy and a water levy, which allows the board to leverage state and federal government funding.

The board has five priorities:



**CLIMATE RESILIENT REGION**



**WATER MANAGEMENT**



**SUSTAINABLE LAND MANAGEMENT**



**PROTECTING AND ENHANCING BIODIVERSITY**



**PEOPLE AND PARTNERSHIPS**



**Average annual rainfall**  
**100-250 mm**

### Traditional Owner Groups

Adnyamathanha, Antakirinja, Matu-Yankunytjatjara, Arabana, Barngarla, Dieri, Eringa, Gawler Ranges, Irrwanyere, Kokatha, Kuyani, Malyankapa, Ngadjuri, Nukunu, Tjajiwara Unmurru, Wangkangurru/ Yarluyandi, Walka Wani, Wilyakali, Yandruwandha/Yawarrawarrka



### Main industries

Mining, Pastoralism, Renewables, Tourism



### Major centres

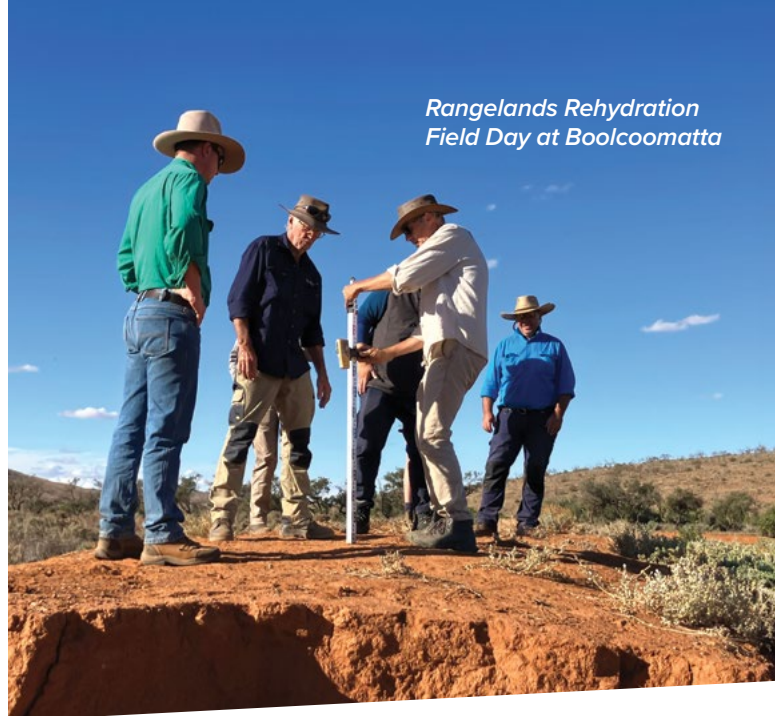
Port Augusta, Quorn, Hawker, Woomera, Roxby Downs, Andamooka, Coober Pedy, Marree, Leigh Creek



*Ecologically Sustainable Rangeland Management planning at Allandale Station*



*Rangelands Rehydration Field Day at Boolcoomatta*



## Climate resilient region

*Resilient landscapes, communities, and enterprises are mitigating and adapting to climate change*

### Road-tripping land managers

A week-long bus tour of western New South Wales gave 17 next-generation pastoral land managers and researchers a rare opportunity to connect and network with like-minded pastoral managers who work in similar climates and conditions.

It enabled participants to experience a range of projects focussed on rehydration and regenerative land management practices in arid pastoral country. The tour was developed to look at methods and programs being implemented at a scale in profitable businesses, to build and improve soil health and grazing system resilience.

Land managers onboard the bus were Charmayne Clarke (Pine Grove), Toby Crowell (North Well), Eliza Duroux (Mt Victor), Dean and Penny Hooper (Gum Downs), Dylan Maidment (Millers Creek), Naomi Maloney (Willochra), Nikki Nutt (Richman Valley Grazing), Neil Sleep (Willangi) and Shea Wellington (Pandie Pandie).

### Rehydrating the Rangelands

A Rangelands Rehydration Field Day in North East Pastoral District in May 2024 supported land managers to implement regenerative grazing practices and increase their understanding of landscape rehydration principles.

Twenty-six people attended the event. They included 16 people directly responsible for the management of 15 arid or low rainfall region properties or pastoral leases and 10 people who undertake extension and capacity building or training roles with a range of land managers in the SA and NSW rangeland regions.

The event was hosted by Bush Heritage Australia at Boolcoomatta Station. It was supported by SA Arid Lands as part of the *From the Ground Up* project, which focused on soil health and grazing and land management practices. Boolcoomatta Station is also one of many soil testing demonstration sites across the SAAL region.



*Assessing pasture at Netallie Station*





Participants in the 2023/24 Property Management Planning program



Testing water infiltration



Mapping contour and catchments



**4** property Ecologically Sustainable Rangeland Management (ESRM) plans completed as part of the Property Management Planning program

**3** workshops completed – personal business drivers, finance and action planning

**1** MLA Carbon Edge Staff Training with the Carbon Program delivery provider

**1** Carbon Community of Practice meeting with Landscape Boards



**87** participants attended **4** field based events that looked at the importance of ground cover on soil health and drought resilience

**1** Emergency Plan developed to identify key natural and agricultural assets in the region, and planning for responses to drought, flood and fires







## Water management

*The region's water resources are managed judiciously*

Projects delivered in the north of South Australia over the past five years have saved an estimated 5700ML/year in water loss from the Great Artesian Basin (GAB).

While the Commonwealth Government's \$27.6m *Improving Great Artesian Basin Drought Resilience* (IGABDR) program has ended. It has saved the equivalent of 2280 Olympic swimming pools or enough water to cover the Adelaide CBD with 1.5m of water, and will deliver benefits for years to come.

The co-operative multi-state and territory program started on 1 July 2019 and incorporated the GAB regions in South Australia, New South Wales, Queensland and the North Territory. Water infrastructure projects were funded on a cost-sharing basis for landholders accessing water from the GAB.

Within the SA Arid Lands, projects included 19 controlled wells through maintenance or decommissioning and redrilling, 36 closed water distribution infrastructure projects and five well casing condition investigations.

By reducing water loss, aquifer pressures and the health of basin-dependent springs were improved, while clean water can be provided for better stock production and domestic use.

The IGABDR program followed the Great Artesian Basin Sustainability Initiative (GABSI) and Interim Great Artesian Basin Infrastructure Investment Program (IGABIIP), which have run since 1999.

Significant public and private funds have been invested in developing and protecting the GAB water resource to support and sustain its economic, social, cultural and environmental values. As demand for the resource continues to grow, it is important that water infrastructure is maintained and water is sourced judiciously.

*Reedy Spring*



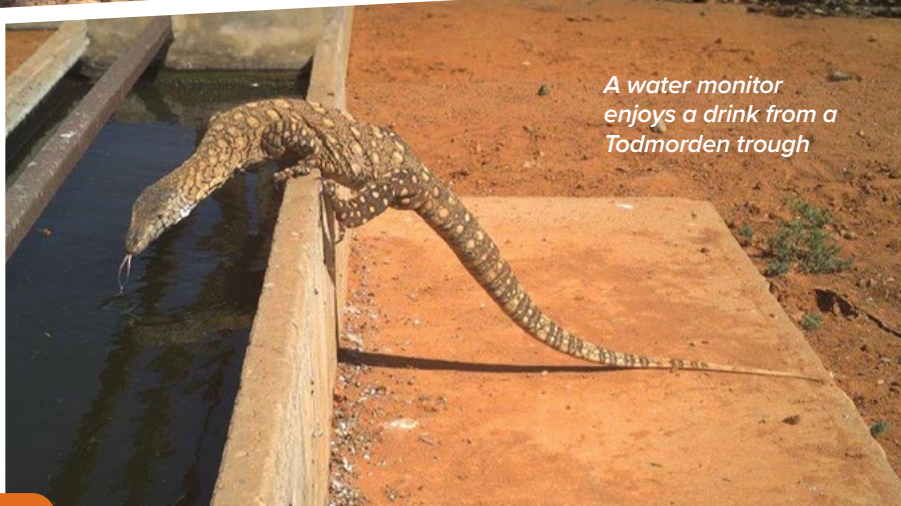
Fencing springs on Murnpeowie Station



A closed water system supported through the IGABDR program



A water monitor enjoys a drink from a Todmorden trough



**2** water accounting trials underway

**2** water accounting agreements approved

**5** Water Affecting Activities (WAA) applications granted,

**1** WAA permit extension,

**13** WAA permits enquiries addressed; **4** compliance visits



Reviewed and commented on **8** mining documents and Department of Mining reports

**2** mine/proposed mine sites visited

Successfully Delivered Future Drought Fund Metering and Monitoring project

IGABDR **5** year program successfully closed out in partnership with Department for Environment and Water

**1** Erosion management plan and site visit for the Neales River. This included stakeholder engagement, procurement of professional services, site inspections

**42 ha** of springs protection by exclusion fencing

**Over 264,164 ha** of land controlled for pest animals in GAB springs environments





Soil sampling at Wintinna



Feed budgeting at Mt Eba

# Sustainable land management

*Land management practices protect soil, vegetation and biodiversity*

Designed to support regenerative grazing practices in the rangelands while building drought resilience, *From the Ground Up* built on the success of the board's Building Pastoral Sustainability Project.

Eight demonstration sites were established across the region, each focussing on soil health, soil rehydration methods and grazing land management practices.

Three on-ground stickybeak days, one virtual field day and three training focussed field days were funded by the project, engaging 324 people over the life of the project. A Grazing Land Management course was delivered to 142 pastoralists and nine extension officers, while a regenerative Rangelands bus tour to western NSW enabled peer-to-peer learning for 18 people on regenerative grazing methods and practices in a semi-arid rangelands environment.

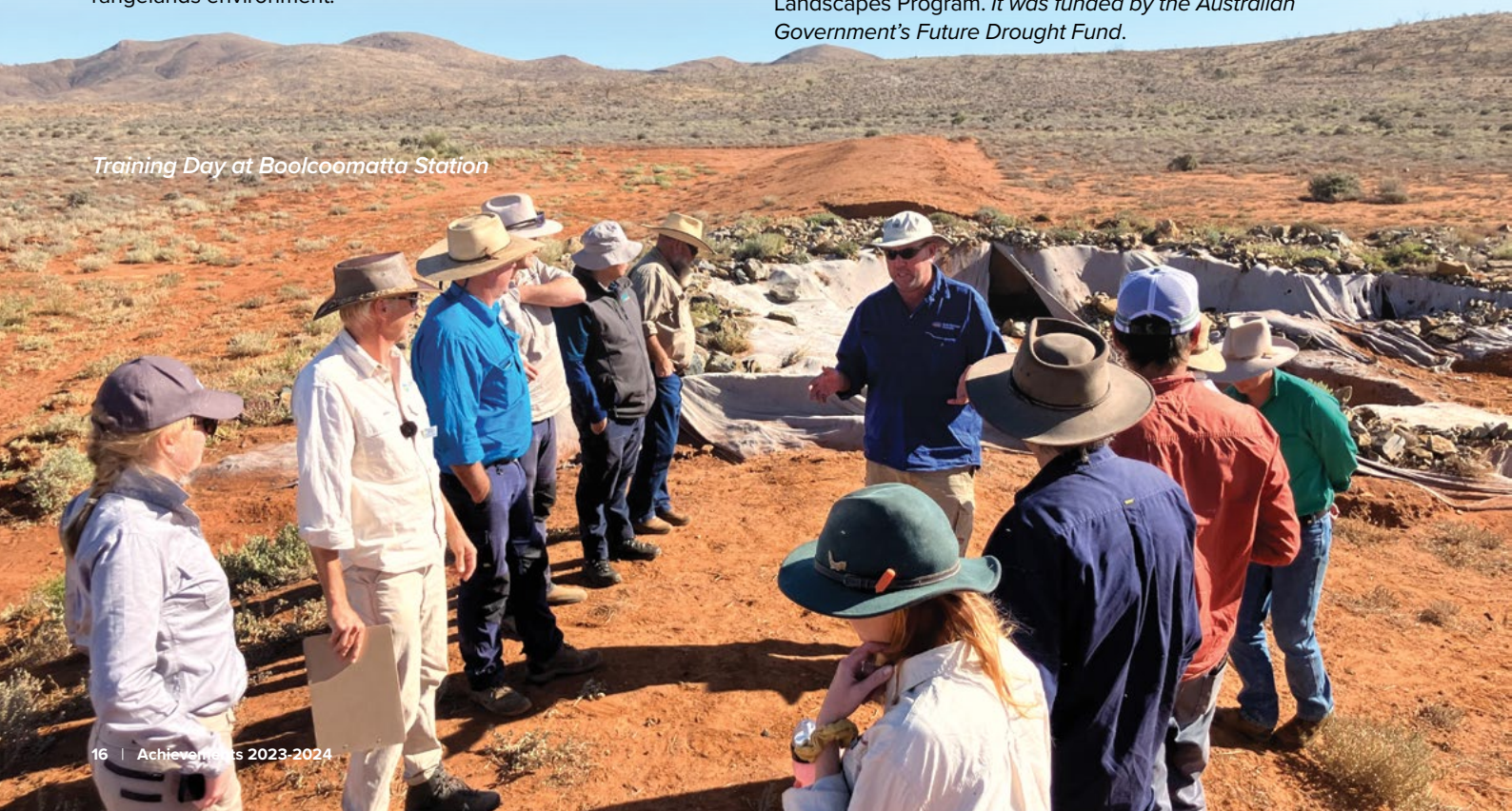
With growing interest from industry leaders for information on soil health and regenerative grazing practices in the rangelands context, the project was a welcome addition to the region's land management programs.

During a period of worsening soil erosion risk, it was important to produce case studies, training and well-designed soil extension programs to support land managers with managing soil health while considering the impact of dry conditions.

As a result of the project, ongoing engagement with grazing managers will continue to deliver extension support as new projects are designed to develop knowledge and skills in drought resilient grazing management practices.

From the Ground Up was delivered by the SA Arid Lands Landscape Board through the Drought Resilient Soils and Landscapes Program. *It was funded by the Australian Government's Future Drought Fund.*

Training Day at Boolcoomatta Station







Bluegrass inspection



Assessing ephemeral drainage



Infiltration trial at Holowiliena Station

**63** ground baiting injection services delivered across **7** districts

**123,311** wild dog baits (80,735 injected and 42,576 manufactured) distributed to 188 participating properties for ground baiting

Provision of **780** fox baits to **4** properties



Facilitated **3** webinars for land managers on updates to the Biteback program

**13** new release Cochineal biological control agent sites

Continued support of Opuntoid cactus control on **15** properties across the region

**9** volunteer groups supported

**80** volunteers, contributing approx. **4,000** volunteer hours to environmental programs

**27** property visits by the Sustainable Agriculture Facilitator

**146** participants in **13** Grazing Land Management workshops

**17** participants on Resilient Rangelands bus tour



Aerial dog baiting of **5,019** baits across **7** properties







*Tori with a Thorny Devil*



*Buffel grass control trial in Port Augusta*



## Protecting and enhancing biodiversity

*Intrinsic biodiversity values are protected and enhanced*

Reducing the threat of predation by cats and foxes on properties outside of national parks has given Idnya (Western quolls) the best chance of survival in the Flinders Ranges.

Over the past year, 625ha of rabbit warrens have been ripped in potential quoll habitat as part of the Idnya Project. Including cultural clearances, the work removed the food source for cats and encouraged them to move out of the area, reducing the risk of quoll interaction.

Held on Arkaba Conservancy, the control footprint was able to be extended with additional funding provided by the property's owners. In the previous 11 years, the property had also undertaken control for cats, foxes, goats and rabbits to support the reintroduction work within the Ikara-Flinders Ranges National Park.

Camera monitoring work was undertaken across the Flinders and Gammon ranges, where new observations of Idnya and Virilda (brush tailed possums) were recorded outside of the on-park reintroduction sites, providing evidence that the vulnerable species is establishing a population beyond its original translocation sites in the neighbouring national parks.

The first trap-based monitoring activity undertaken off-park also provided baseline data for future monitoring events.

Fox and goat detections were monitored across the year-long project, comparing results across baited and controlled areas with uncontrolled areas. Fox detections were three times higher at non-baited sites, while goat detections were four times higher in areas in which no aerial cull had been undertaken.

Idnya are a totem species for the local Adnyamathanha people and disappeared from the area more than 100 years ago. Idnya and Virilda were reintroduced to Ikara-FRNP in 2014 in a partnership between Department for Environment and Water and the Foundation for Australia's Most Endangered (FAME) and the former SA Arid Lands Natural Resource Management Board.

The Idnya project was delivered by the SA Arid Lands Landscape Board, through funding from the Australian Government's National Landcare Program.







Gibber dragon



Ryan Hayward was one of the SAAL staff members to help with an Ildiya trapping at Arkaba



Thermal binoculars were used for feral animal aerial control



Pig workshop at Mutooroo

Buffel grass control across **61,040 ha**

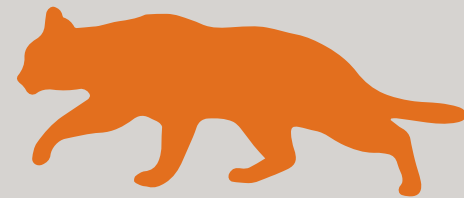
**60** sites in the Coongie Ramsar were assessed and **5** sites identified and prioritised for targeted Buffel grass surveys

**2** pig baiting trials resulting in control of at least **80** feral pigs

**8** feral animal aerial control programs targeting feral pigs, goats and large herbivores across more than **2,132,978 ha** on **29** properties in partnership and support with the Department for Environment and Water and PIRSA

**8,327** goats controlled, retaining **7,993.92 kg** of vegetation on the ground daily, or **2,918** tonnes of vegetation per year.

**1** threatened native animal species surveyed (Western Quoll) across the Flinders and Gammon Ranges



**1** cat control event in Marree in partnership with Outback Communities Authority

**625 ha** of rabbit warrens ripped removing the food source for cats and reducing the risk of quoll/cat interaction

**2** surveys of pest activity (foxes, cats, goats, rabbits in the Flinders Ranges)







## People and partnerships

*People and community are central to looking after our landscapes*

### Supporting Indigenous Ranger groups

Caring for Country and a strong willingness to support and grow the sector were some of the key aspirations of the Rangers who came together for the first ever SA Arid Lands Indigenous Ranger Gathering on Kokatha Country in September 2023.

The two-day event was attended by all five established Indigenous Ranger groups in the region – Kanku-Breakaways, Arabana, Nantawarrina, Yappala and Gawler Ranges Aboriginal Corporation, as well as emerging group Kokatha.

Indigenous Rangers undertake a variety of land management work that includes erosion control, monitoring and surveys of native plants and animals, monitoring of mound springs, managing visitor impacts, supporting the translocation of threatened species and managing pest plants and animals.

The event enabled groups to share the work they are doing on Country and provided an opportunity to learn from each other.

### Connecting the board and communities

The SA Arid Lands Landscape Board supports seven Landscape Groups across the region which provide an important link between local communities and the board.

Groups are based in the Gawler Ranges, Kingoonya, Marla-Oodnadatta, Marree-Innaminka, North East Pastoral, North Flinders and Port Augusta-Quorn districts. Members are local people who ensure there is community input into planning and program delivery for the region.

They help the community care for the environment and manage natural resources sustainably by building awareness, skills and networks.

Find out more [www.landscape.sa.gov.au/saal/about-us/our-board/landscape-groups](http://www.landscape.sa.gov.au/saal/about-us/our-board/landscape-groups)



Aboriginal Ranger Gathering  
on Kokatha Country





Bindarrah Grazing Land Management Workshop



Iron Knob worm farm workshop



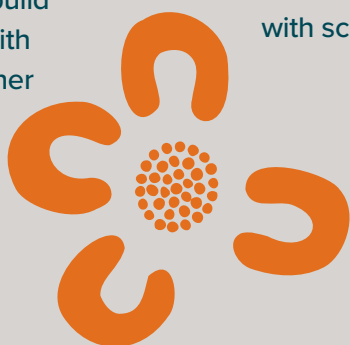
Mt Little seed workshop

**24** Landscape Group meetings across **7** Landscape Districts with **64** community members involved in District Groups

**11** landholder capacity building and community education events delivered

**12** Grassroots Grants awarded, valued at almost \$100,000

**2** Aboriginal Engagement workshops to build relationships with Traditional Owner groups



**4** editions of *Across the Outback* delivered to **2,036** subscribers

**1** Inaugural Indigenous Ranger forum at Roxby Downs Station

Supported **15** community events across the region

**8** nature education events with schools

Supported **2** Kids on Country events Witchelina and Hiltaba run by Nature Foundation SA

Hosted **2** meetings with SAAL Landscape Board and Pastoral Board meeting and community event at Mt Ive and Copley



Supported volunteer natural resource management activities across **7** properties undertaking cactus and pest plant control and property works



# Projects – Looking forward

## LANDSCAPE PRIORITIES FUND

### Resilient Rangelands – Managing Biosecurity threats for climate resilient landscapes

This project addresses the significant threat posed by feral goats, feral pigs and wild dogs to the condition and resilience of the rangelands ecosystems and the agricultural enterprises. It underpins an innovative strategy to address total grazing pressure impacts on biodiversity and pastoral production.

### Coordinating management of rangeland goats

Focussing on landscape scale management of goats to ensure a coordinated effort is implemented by formally establishing a network and harnessing capability across rangeland regions, in collaboration with market, neighbouring rangelands landscape boards, Native Title holders and policy makers.

### Sustainable Land Management project

Working with land managers to increase native vegetation and biodiversity, this project provides capacity to position the region to take part in the Nature Repair Market outlined in the Federal Government's Nature Positive Plan and provides opportunities for increased restoration of groundcover and critical habitat protection. It provides information and work with land managers on emerging nature repair markets, native vegetation restoration projects and land management practices to increase groundcover and biodiversity.

### Kangaroo Partnership Project – improving landscape and community resilience in South Australia

Building on the coordinated partnership approach successfully developed by the previously funded project, this iteration will further refine efforts on kangaroo management priorities, explore and trial new pathways and offer knowledge sharing opportunities to increase public understanding of kangaroo management social licence for solutions to these issues. Understanding the need for Kangaroo Management through information sharing, support for initiatives to help land managers better manage the issue and optimise the product. The project involves multiple partners includes the SA Drought Hub which will fund trials and activities in partnership with Landscape boards.

## STATE GOVERNMENT

### Carbon Outreach program

The Carbon Outreach project empowers land managers across regional South Australia to understand carbon accounting and low emissions technologies and practices. A Carbon Outreach officer will offer tailored training to pastoralists, First Nations and conservation land managers. Landscape Board staff will be upskilled to be the go-to independent advisors for emissions reduction.

### Soils Extension Project

Building the capacity and knowledge of Soil Extension officers, through this project, networks will be built and engagement will take place with family and industry groups, demonstration sites will be established, field days and workshops held and case studies developed.

## SAVING NATIVE SPECIES PROGRAM

### Plains-wanderer

Partnering with Bush Heritage Australia and Birdlife Australia, this project helps improve understanding of the distribution of the Plains-wanderer. It includes deploying bioacoustic equipment in known and potential habitat and analysing call data for the presence and absence of birds. A management guide will be developed for landholders and a species distribution map will be updated to assist in tracking its trajectory.

## BHP

### Lake Eyre Basin springs restoration

Partnering with BHP, this project delivers community and education events to highlight the importance of springs. It provides support for the Friends of Mound Springs and Arabana Rangers to continue their work in protecting culturally and ecologically significant Lake Eyre Basin Riparian Vegetation and Springs.

## SA ARID LANDS LANDSCAPE BOARD

### Biteback – Wild dog management

The board runs a comprehensive Wild Dog Management Program in partnership with landholders and external investors. Twenty-one wild dog local area groups are supported to implement the best practice guidelines for baiting and wild dog control.

## NATURAL HERITAGE TRUST

### Discovery4Recovery

This new project addresses key threats to the Western Quoll by targeted pest species to complement existing management programs to reduce threats of predation. It continues monitoring of quolls, the Arckaringa Daisy and key populations of Flinders Ranges Purple-spotted Gudgeon to refine understanding of population status, trends and inform management actions. It will also survey for Desert Greenhood to determine its population and extent, providing opportunities to engage with relevant agencies, First Nations groups and the wider community to promote participation in ongoing conservation efforts of EPBC-listed species and habitats.

### Wetland Wonders

A cooperative approach will be taken to manage key threats to the Coongie Ramsar values and beyond by focussing on feral animal impacts and priority weed incursions, particularly after flood. On-ground management actions are informed by a Strategic Adaptive Management process and will be implemented in collaboration with relevant land managers. Monitoring of threatening processes and their impacts will involve traditional owners and community volunteers. Wetland Wonders aims to fill knowledge gaps in past and existing monitoring.

### Sustainable Agriculture Facilitator

The Sustainable Agriculture Facilitator will engage and work closely with pastoralists, land managers, producer groups, related community organisations, farming systems groups, agri-business, industry bodies and agencies. The facilitator will implement workshops, events, grant programs and activities that promote sustainable farming outcomes that achieve Australian Government objectives for sustainable agriculture and natural resource outcomes.

