

Murraylands and Riverland Landscape Board

Performance report

Quarter 4 | April - June 2022

Outcomes aligned with the 2021-22 annual business plan investment and priorities



From the General Manager

I am pleased to present the Murraylands and Riverland Landscape Board (MRLB) Quarterly Performance Report for the fourth quarter of 2021/2022.

This report summarises the performance and activities over the past three months and tracks progress towards delivering the investment and priorities as outlined in the Murraylands and Riverland Landscape Board Annual Business Plan.

It provides the regular review of programs, services and projects and also highlights achievements, key partnerships and other related matters that have occurred during the period.

This report is one of the organisation's key reporting tools used to deliver performance related information to board members, the organisation and the wider community.

I hope that you will find its content valuable and informative.



Andrew Meddle
General Manager













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*note that budget may be different to that of the Business Plan, due to additional income being received or carry-over of funds from prior year.

1. Executive Summary

In quarter 4 of 2021-22, the following progress has been made and program delivery is **on track** for the financial year.

Strategic Priority	Annual Business Plan Programs	Program Strategies
 Sustainable agricultural and pastoral landscapes	<ul style="list-style-type: none"> Sustainable agriculture Farm soils and vegetation management Regional Landcare facilitator Pest plant and animal management 	 <ul style="list-style-type: none"> On track (13) Not started (0) Completed (4) Behind schedule (2)
 Sustainable water use	<ul style="list-style-type: none"> Sustainable irrigation Water planning and management Water allocation planning Water literacy Pest plant and animal Management 	 <ul style="list-style-type: none"> On track (7) Not started (0) Completed (10) Behind schedule (0)
 Healthy rivers, lakes and wetland	<ul style="list-style-type: none"> Wetlands and floodplain restoration Restoring RAMSAR ent 	 <ul style="list-style-type: none"> On track (3) Not started (0) Completed (3) Behind schedule (1)
 Healthy landscapes	<ul style="list-style-type: none"> Landscape scale restoration Restoring Iron Grass grasslands Threatened mallee birds Pest plant and animal management 	 <ul style="list-style-type: none"> On track (8) Not started (0) Completed (13) Behind schedule (0)
 People at the heart of landscape management	<ul style="list-style-type: none"> Grassroots grants Education program Aboriginal partnership program Capacity building and volunteer Support Citizens' science 	 <ul style="list-style-type: none"> On track (24) Not started (0) Completed (5) Behind schedule (0)
 Foundational programs	<ul style="list-style-type: none"> Board leadership and governance Planning and evaluation Customer and business services Communications Council levy collection fees 	 <ul style="list-style-type: none"> On track (23) Not started (0) Completed (5) Behind schedule (2)

Highlights Summary

A summary of the key highlights from across the regional priorities:

- Engagement targets have continued to be exceeded with high levels of land manager participation in the activities coordinated by the sustainable agriculture team.
- A successful field day was held in collaboration with the SA branch of Soil Science Australia that showcased the work that is being undertaken as part of the CCW Soils project in the Riverland.
- Two new district officers joined the team. Daniel Rossiter brings a wealth of pest control experience from his previous role at Terminix and Rob McGregor brings a broad array of skills from firefighting to handy-man and land management.
- Finalisation of the Riverland Winegrape Irrigation Benchmarking project in collaboration with the Australian Wine Research Institute (AWRI).
- Moving into the implementation phase of the National Water Grid Authority project in the Lower Murray Reclaimed Irrigation Areas (LMRIA).
- 263 landholders were contacted to see if they would like to get a water sample tested for the 456 licensed wells in the region. 194 samples were returned giving a 42.5% response rate on number of groundwater wells tested for salinity in the region.
- In 2021-22, the water resource team collaborated with DEW Water Science and Water Licensing to undertake a comprehensive review of the Mallee Prescribed Wells Area Water Allocation Plan.
- In April, threatened fauna ecologist Melissa Burford began the first lot of bird surveys in Billiatt Conservation Park and Wilderness Protection Area. Extensive bird surveys in Billiatt Conservation Park/Wilderness Protection Area have not occurred since the fire in 2014.
- Sixty hectares of the Tiliqua Nature Reserve (owned by Nature Foundation) have been targeted for strategic re-introduction of the key habitat plant, iron-grass (*Lomandra multiflora ssp. dura*).
- A significant part of our iron-grass native grassland project is maintaining and monitoring the 15 trials we have set up over the past few years - including 6 grazing and seeding trials, 6 revegetation trials, a kangaroo and rabbit exclusion trial and our original sheep grazing and slashing trial at Poonthie Ruwe Conservation Park.
- Olive control was completed along DIT state and federal roads and highways.
- Hudson pear control at Devon Downs extended across three private properties that were patrolled, mapped and treated by a team of five staff. As many as 267 individual plants were found and treated within the control area.
- Implementation of environmental watering was completed for the 2021/22 year, completing what proved to be a very complex undertaking.
- A watering proposal has been submitted to the CEWO for their approval to apply 12,000ML water to priority sites in SA in 22/23.
- African boxthorn control work has already commenced on the levee bank at Ponde, targeting heavily infested areas that landholders cannot manage. This work will provide good in-roads to engaging land managers in the program.
- As part of this year's Precious Plants for Precious People program, more than 1,000 threatened silver daisy-bush seedlings were provided to primary school students across the region to give as a gift to a special person in their lives.

- This year's River Murray Youth Council (RMYC) program is bigger and better than ever! With 19 new registrations, a total of 25 high school students from across the region have stepped up to find out more about our local landscapes, get actively involved in a range of hands-on activities, and develop valuable leadership skills.
- Freshwater turtles are important species for First Nations groups along the River Murray. In June a major collaborative project engaged 45 Ngarrindjeri community members in a series of six yarning circles at Murray Bridge, Tailem Bend, Wellington, Meningie, Raukkan and Goolwa.
- As part of the landscape board's commitment to reconciliation and cultural awareness, a recent all staff day included a guided tour the rock shelters and rock art at Ngaut Ngaut Conservation Park on the River Murray near Nildottie
- The masterclass workshop hosted at Raukkan was delivered in collaboration by PIRSA and district staff. The event was well attended by individuals from Raukkan Aboriginal community, Ngarrindjeri Lands and Progress Association and Coorong National Park. Sessions focussed on introducing an array of tools and techniques available to control declared pest plants and animals.
- The Find Our Fungi project has 10 new species for people to look out for in the drier Mallee areas and contribute their sightings to Fungimap.
- Two volunteer recognition events were held, one near Murtho and one at Wellington, in May. These events celebrated and recognised the impact of and contributions by 75 volunteers.
- Social media performance has grown well in this quarter, with Facebook followers now over 2000 for the first time. One post in May received 13,000 views and was shared across third party accounts, resulting in a spike of activity.
- 97% of performance review and development (PRD) sessions were completed.
- The Murraylands and Riverland Landscape Board's 2022-23 Annual Business Plan has been approved by the board and is available on our website.
- The Landscape Evaluation Framework for the Murraylands and Riverland Landscape Board was finalised and approved by board.

Risk and Challenges

A summary of the potential risks or key challenges in program delivery this quarter.

Risk	Management Strategy
The absence of a team member in the communications team has increased the workload for other staff members.	This may need to be escalated to the Executive Leadership Team if the sick leave becomes extended, or if the workload becomes too much for the remaining staff members. Possible mitigation may be to put on a temporary staff member to assist.
The human resources advisor's workload is still high but has become slightly more manageable. The human resource advisor still does not have any time for new projects, research and keeping up to date with latest developments and changes in policy.	As of 1 July 2022 more funding for staff will be allocated to the human resources function.
The 12-month Healthy Rivers project funded by a grant won by Mid Murray Landcare has experienced a delayed start. There is currently no contract in place and funds have not been received by the board to enable work. Predicted high water levels are also a concern as these can impede the amount of active yellow water lily growth. Yellow water lily is the focus weed of the Healthy Rivers project.	Staff to meet with Mid Murray Landcare and negotiate an agreement for sign-off in time for summer.
With Regional Land Partnerships (RLP) moving into its fifth and final year it is hoped that guidance on the next phase of the program will be received in 2022/23. Traditionally information has been slow to be released which makes it challenging as the finalisation of the current program coincides with development of the new program which is resource intensive.	Continue working proactively with the Australian Government through the board's investment and information team to gain clarity around the next phase of the RLP program.
Future opportunities with the \$60m on-farm efficiency component of the Off-Farm Efficiency Program (OFEP) still remain uncertain.	Difficult to directly influence as it is highly political and linked to the Murray-Darling Basin Plan however now that state and federal elections have been conducted it is expected that further clarity will be received in the near future.
The Marne Saunders Water Forum was held in February this year. Outcomes from the forum hoped that more community engagement would be delivered this financial year but this was unable to occur due to staff movements and capacity. Instead staff have delivered critical and high priority work such as the 10-year Mallee WAP review, and statutory consultation on the River Murray WAP (which was initially unscheduled work for 2021-22 but became a priority due to community engagement activities undertaken in late 2021).	Increase in staff resourcing with extra staff coming into the team in 2022-23 will enable the team to re-engage the Marne Saunders community from July/August in 2022.
The activities of the wetlands team were affected by COVID and adaptations were made.	Staff member downtime impacted some of the delivery but the team worked hard to maintain and continue functionality. There was no real impact to the scope of work undertaken, or the standard of work delivered, however team members have been under sustained additional work load burden to deliver the full scope of work planned under these rolling down time conditions.

2. Performance by Strategic Priority



Sustainable agricultural and pastoral landscapes

Program investment

Program	Levies	External	Total
Sustainable Agriculture	331,655	278,245	609,900
Farms soils and vegetation management	-	441,648	441,648
Regional Landcare Facilitator	-	135,077	135,077
Pest Plant and Animal Management	721,053	175,110	896,163
Program support	492,155	-	492,155
TOTAL	1,544,863	1,030,080	2,574,943

Program investment as per the 2021-22 Murraylands and Riverland Business plan.

Program Progress Summary

Engagement has been consistently high at opportunities such as field days which have showcased the outcomes of work undertaken by the board, addressing issues around soil health and supporting landholders in responding to drought. A number of grants issued through the board's Grassroots Grants program supported production endeavours and the opening of the Agricultural Knowledge Small Grants program in this period is expected to extend that reach further.

New staff joined the team in the form of a newly funded soils extension officer and two officers being employed into the Murraylands district team. There was also a change to the Murraylands District Manager and conclusion of contracted employment for a district officer in the Riverland. These staff bring new skills to the region and will support the continued delivery of regional outcomes.

Partnerships were key in tackling vertebrate pest issues over this quarter with work done on rabbit control, wild dog management and fox control in conjunction with several groups. Weed control also continued with landholders engaged and awareness raising undertaken with community.

Quarterly Program highlights

- Engagement targets have continued to be exceeded with high levels of land manager participation in the activities coordinated by the sustainable agriculture team.



Photo 1. Attendees at the Monarto Farm Forestry Field Day.



Photo 2. Attendees at the Regenerative Agriculture Community of Practice facilitated discussion.

- A successful field day was held in collaboration with the SA branch of Soil Science Australia, showcasing the work that is being undertaken as part of the CCW Soils project in the Riverland.



Photo 3. Jeremy Nelson addressing attendees at the Soil Science Australia Riverland field day at the CCW Soils field site at Monash.

- The board participated in a round table engagement session with the National Soils Advocate, hosted by the Honorable Tony Pasin.
- Engagement with the Drought Resilience Adoption and Innovation Hub was undertaken in this quarter with a follow up session planned for the first quarter of 2022/23.
- The first stage of the communications upgrade for the automatic weather station (AWS) network has been completed.
- The board's new soil extension officer commenced in June as part of the collaborative Landscape Board's Statewide Soil Extension project.
- Two new district officers joined the team in April and May respectively. Daniel Rossiter brings a wealth of pest control experience from his previous role at Terminix. He is based in Karoonda and Lameroo and is a welcome note of stability for the service delivery in the southern Mallee area. Rob McGregor brings a broad array of skills from firefighting to handy-man and land management. He will provide service from the Cambrai office while Scott Hutchens is on secondment



Photo 4. Barrie Williams commenced as the region's new Soil Extension Officer in June.

to the river projects. Both new district officers are currently undertaking training necessary for them to perform their roles. Rob was recently featured in a media release adopted by the Murray Valley Standard on 16 May 2022 introducing him to the community.

- **Rabbit control RHDV1 K5 project**

Staff are continuing to support rabbit management programs undertaken by Monarto Safari Park and National Parks and Wildlife Service (NWPS) in the Monarto Woodlands with advice the provision of tools. Monarto Safari Park has already been using Calicivirus RHDV1 K5 as a tool in areas of conservation or amongst carnivorous zoo animals where the use of 1080 and pindone products is not suitable. Carrot-based K5 programs were recently undertaken and observed a good uptake of feed by rabbits. Further releases in other areas are planned for the next few months. The purchase of two thermal monoculars will greatly aid the monitoring of rabbit populations going forward as the equipment enhances visibility where currently the rabbits are able to hide in vegetation and avoid detection.



Photo 5. RHDV1 K5 Calicivirus release program in Monarto woodlands area.

- **Wild Dog baiting**

Wild dog baiting in Ngarkat Conservation Park was undertaken in April with several district staff assisting with the program. This time round we had some assistance from education officer Julie Schoefield, who took up the opportunity to experience baiting the Border Track. District officers worked with landholders in the Karte area after receiving reports of wild dog sightings. 30 wild dog baits, funded through the Box Flat Wild Dog committee, were issued to 2 landholders and district officers will follow up on the outcome.

- Staff were invited to present at the Berri Monash Agricultural Bureau, and engaged on current weed and pest control issues facing these landholders. There was strong interest in the fox control options available to them, and proved to be beneficial in dispelling some myths and helping them to overcome some of their perceived barriers. Staff gained some useful feedback in weed species affecting these landholders, and have gathered information on non declared species that they may be seeking support with into the future.



Photo 6. District officer Jamie Courtney presenting to the Berri Monash Ag Bureau on fox control and demonstrating the use of a canid pest ejector.

Progress on program strategies

Program strategies	Focus Areas*	Status
Monitor regenerative grazing trial sites, engage with landholders, develop case studies and extend results.	3	😊
Investigate regenerative opportunities in low rainfall zones, undertake grower engagement, management, investigation, soil testing, literature review and extension.	3	✅
Manage weather station network.	5	✅
Deliver webinars around the optimisation of ground cover and climate bench marking.	4	❌
Monitor the acidic soils in the Mallee trial site, undertake farmer survey, soil testing and extension.	1	✅
Establish and monitor carbon levels (base line and over time) at relevant trial sites	1	✅
Establish and monitor dry saline trial, undertake grower engagement and extension.	4	✅
Work with industry groups on partnered projects including Mallee seeps, and legumes on sands, including trial site monitoring and extension	1	✅
Deliver spring crop walks, including the involvement of Regional Agricultural Landcare Facilitators.	1	✅
Coordinate, guide and implement control programs for identified priority pests across the region.	2	✅
Undertake African lovegrass trial and extension to demonstrate best practice management.	2	❌
Monitor and control of incursions pathways across the district.	2	✅
Provide field officer to manage on-ground works as part of the Southern Mallee Pest and Weed project.	2	😊
Coordinate fox management program, fox bait distribution events and work with the working group to plan and execute the program.	2	✅
Support the wild dog landholder network, provide advice and tools for long-term monitoring and management of wild dogs. Support the baiting program across Ngarkat Conservation Park.	2	✅
Assist landholders to control priority weeds.	2	✅
Assist landholders to control priority pest animals including rabbits, goats and deer.	2	✅
Maintain on-farm trials, build relationships with graziers and promote the benefits of managing healthy native grasslands.	4	😊
Promote the production benefits of healthy native grasslands on sheep grazing properties via communication and extension opportunities, events and one-on-one interactions.	3	😊

*Refer to Appendix 1

Legend  = On Track,  = Not Started,  = Behind Schedule,  = Completed



Sustainable water use

Program investment

Program	Levies	External	Total
Sustainable Irrigation	215,756	6,420,372	6,636,128
Water Planning and Management	1,961,328	-	1,961,328
Water Allocation Planning	450,396	-	450,396
Water Literacy	-	-	-
Pest Plant and Animal Management	229,850	54,000	283,850
Program Support	1,330,698	-	1,330,698
TOTAL	4,188,028	6,474,372	10,662,400

Program investment as per the 2021-22 Murraylands and Riverland Business plan.

Program Progress Summary

It has been a busy quarter in the water space. Support was provided to the education team to run sustainable water use professional development sessions for the region's school teachers. Staff worked with the DEW water licensing team to implement the new Environmental Lower Murray Allocation (ELMA) policy in the Lower Murray Reclaimed Irrigation Areas (LMRIA). This provided staff the opportunity to see ELMA in action where SA Water have been upgrading infrastructure to deliver this critical water to the LMRIA to combat soil salinity issues.

The statutory consultation on proposed changes to private carryover within the River Murray Water Allocation Plan was wrapped up with reporting on consultation feedback being drafted ready for the Landscape Boards Water Advisory Committee and the landscape board in July.

The Water Efficiency Program (WEP) continues to progress well with 22 of 28 projects now having completed contracted on-farm works. The 6th bi-annual report for WEP was prepared and submitted to DAWE and the landscape board hosted staff from the DAWE in late June to visit a number of WEP projects and gather feedback from both participants and board staff.

The AWRI Irrigation Benchmarking project was concluded and the final report submitted. The key findings of the project were that there remains significant variation in irrigation systems that impact both the efficiency of water use and vineyard productivity. The landscape board and AWRI will meet early in the first quarter of 2022/23 to discuss next steps and opportunities to collaborate.

The MoAA for the delivery of the LMRIA Water Accessibility and Deliverability project was executed. A project plan has been developed and engagement with local landholders and irrigation contractors has commenced. Recruitment for a project officer to support the project is also underway.

Water literacy activities undertaken during 2021/22 will be extended into 2022/23. It remains unclear how and also when the next tranche of Australian Government's Off-Farm Efficiency Program (OFEP) will be rolled out and the general implementation of the Basin Plan will shape what needs to be delivered and supported in the water literacy space.

Quarterly Program highlights

- Implementation of the Water Efficiency Program continues to progress ahead of schedule with positive feedback from participants on the benefits that they have derived from completing on-farm works.



Photo 7. New water metering telemetry installed as part of the Water Efficiency Program.



Photo 8. New storage dam installed as part of the Water Efficiency Program.



Photo 9. Permanent netting that has been installed under the Water Efficiency Program.

- Preparation and submission to DAWE of the 6th bi-annual report for the Water Efficiency Program (WEP).
- Finalisation of the Riverland Winegrape Irrigation Benchmarking project in collaboration with the Australian Wine Research Institute (AWRI).

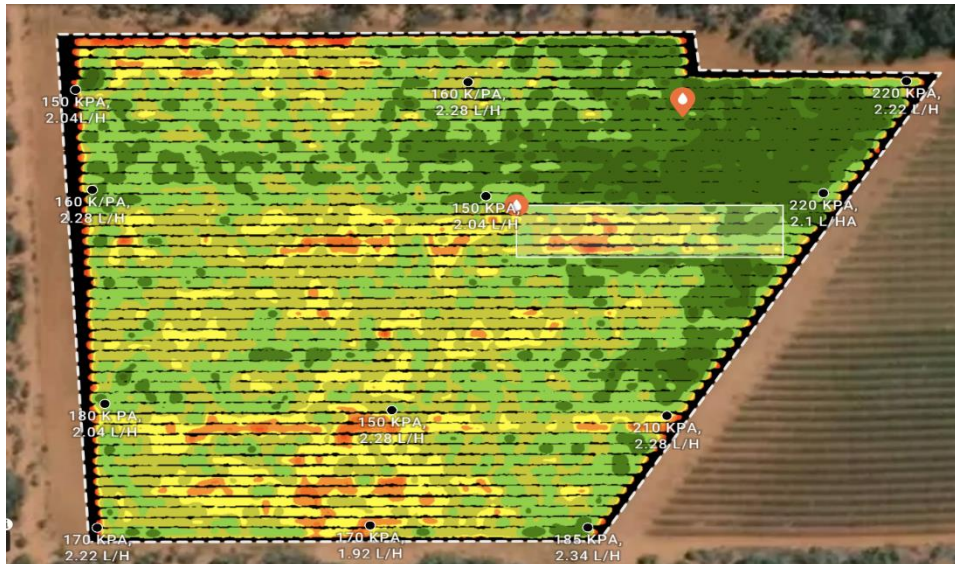


Photo 10. Example output from the AWRI Riverland Winegrape Irrigation project.

- Moving into the implementation phase of the National Water Grid Authority project in the Lower Murray Reclaimed Irrigation Areas (LMRIA).
- In the Marne Saunders annual wrap up, a 20-year fish analysis was completed early in the year which was a critical talking point for discussion with the community at the Marne Saunders Water Forum. The team set out to hold the Marne Saunders Water Forum this year as a first step in re-engaging the community on the current status of water resources. The team successfully completed this achievement and is in the planning stage for the next step of community engagement. Meanwhile, the team continues to support ongoing flow and fish monitoring in the Marne Saunders and supported the community with developing a Grassroots Grant project concept to investigate alternate water sources for a locally threatened black fish community in the lower Marne. The team was also involved this year with the Flows for the Future program to gain a better understanding of how the program is implementing low flow devices across the Eastern Mount Lofty Ranges, including the Marne Saunders catchments.
- The new Water Affecting Activities officer has been learning about the role, responding to community enquiries, undertaking thorough permit assessments and also coordinating the annual salinity sample monitoring. Every year the team contacts water license holders in the Marne Saunders, Mallee and Peake Roby Sherlock prescribed areas to offer landholders the service of free salinity testing from their groundwater extraction wells. Landholders drop off water samples to the local landscape board office and samples are then sent to DEW for testing. The results are made available on the WaterConnect website. This year 263 landholders were contacted to see if they would like to get a water sample tested for the 456 licensed wells in the region. 194 samples were returned giving a 42.5% response rate on number of groundwater wells tested for salinity in the region.



Photo 11. Staff having an opportunity to see ELMA in action where SA Water have been upgrading infrastructure to deliver this critical water to the LMRIA to combat soil salinity issues.

- A key responsibility of the landscape board is to review Water Allocation Plans (WAPs) every 10 years, pursuant to the *Landscape South Australia Act 2019*. In 2021-22, the water resource team collaborated with DEW Water Science and Water Licensing to undertake a comprehensive review of the Mallee Prescribed Wells Area WAP. The science review found that bore/well monitoring has revealed stable water level, salinity and extraction trends. Since the adoption of the WAP in 2012, there have been no exceedances of any of the water level or salinity resource condition limits and there is little likelihood of any exceedances occurring in the near future because of the stable trend in extractions. The current monitoring regime provides sufficient data to satisfy the monitoring requirements of the WAP as the network has been recently expanded to monitor changes in the distribution of irrigation as well as new development north of the Prescribed Wells Area (PWA) boundary. A summary of the review will soon be available on the board's website and community engagement on the amendment phase of the Mallee WAP to bring it up to date with current water reform policies and investigate community feedback will occur later in 2022.



Photo 12. Mallee WAP review. Photo is of a central pivot irrigation setup to efficiently water potato crops in the Mallee.

- Opuntia control is proving to be popular with Riverland landholders, with enquiries following social media and interviews regarding opuntia identification and control increasing in the last several months. Numerous landholders are now requesting identification of their opuntia species, which aids in determining the most appropriate control method. Those who are eligible for cochineal control have taken this up enthusiastically, and now we have multiple nursery and release sites across the Riverland. Staff are continuing to be targeted in the types of cochineal they use and the opuntia species they release onto, to help improve the efficacy of the cochineal in our district. In high priority areas where the fruit may pose a fruit fly host risk, landholders have been supported with chemical control.



Photo 13. Whilst not a declared pest plant in SA, the fruit of Indian fig can be a fruit fly host, and so along with other declared Opuntia species, is targeted for chemical and biocontrol across the Riverland.



Photo 14. *Austrocylindropuntia subulata* was a new declared cacti species identified by district staff in the Riverland.

- Completion of cost-recovery works for the financial year has been a highlight across the districts. Additional funding for DIT roads was secured last quarter, and was successfully administered this quarter, targeting African lovegrass and rabbits. Some of this work was supported by adjacent landholders, who have been undertaking their own pest plant and animal control programs, and were supportive in providing information to guide priority locations of works, and permit contractor access. This has been a positive example of how landscape boards are best placed to provide this cost recovery work, both in value for money, increasing control footprint and engaging local community.
- The Riverland pig project continues, with a trap, free feed and remote cameras deployed at several locations. Early monitoring indicates that pigs have moved on from the targeted areas, and this may be due to the cooler weather and reduced water. Landholders are continuing to monitor and provide feedback about trials, and are eager to continue when the seasons turn and high flows and pumping programs return.
- District staff have been providing assessment and feedback through the interconnector development process. District staff are supporting the environmental officer, having participated in the first on site review of the alignment currently being worked on. This was to survey for weeds, review processes and use as a general skill and knowledge sharing opportunity. District staff will be participating in these at least once a season in an attempt to upskill the staff from Downer, the contractor for the interconnector project, and prevent movement of pest plants along the project.

Progress on program strategies

Program Strategies	Focus Areas*	Status
Monitor streamflow and fish populations in the Marne Saunders Prescribed Water Resource Area and undertake a 20 year review of fish monitoring to date.	3	😊
Coordinate and engage the Marne Saunders community on the current status of the prescribed water resource.	3	😊
Coordinate and collect Annual Water Use Surveys and Salinity Samples from the Mallee, Peake Roby and Sherlock, and Marne Saunders prescribed wells/water resource areas.	2	😊
Implement the River Murray Water Allocation Plan (WAP) specifically, the Environmental Land Management Allocations (ELMA) policy and the upper Pike Extraction Limit.	1	😊
Undertake a 10 year review of the Water Allocation Plan for the Mallee prescribed wells area.	3	😊
Investigate pathways to develop a monitoring and evaluation framework for water allocation plans in the region.	4	😊
Coordinate the engagement of First Nations in water planning and management.	3	✅
Assess and issue water affecting activity permits and provide comments on development applications in relation to the region's water resources.	2	😊
Support the coordination of bi-monthly Water Advisory Committee meetings.	3	😊
Produce material to support the community's understanding of policies within water allocation plans, specifically in 2021-22 the updated ELMA policy.	3	😊
Support the implementation of the Murray-Darling Basin Plan.	1	✅
Identify project opportunities that support the adoption of alternative water sources.	2	✅
Identify project opportunities that deliver sustainable water outcomes.	1	✅
Support communication and engagement activities that contribute to the community having an improved understanding of water literacy.	3	✅
Coordinate, guide and implement control programs for identified priority pest plant species.	5	✅
Support landholders to conduct coordinated pest animal control programs, and investigate options for projects and alternative support.	5	✅
Plan and complete cost recovery works targeting priority species and locations in a coordinated manner.	5	😊

*Refer to Appendix 1.

Legend  = On Track,  = Not Started,  = Behind Schedule,  = Completed



Healthy rivers, lakes and wetlands

Program investment

Program	Levies	External	Total
Wetlands and Floodplain Restoration	476,751	1,159,275	1,636,026
Restoring Ramsar Wetlands	-	866,478	866,478
Pest plant and animal management	175,506	-	175,506
Program Support	299,266	-	299,266
TOTAL	951,523	2,025,753	2,977,276

Program investment as per the 2021-22 Murraylands and Riverland Business plan.

Program Progress Summary

Implementation of environmental watering was completed for the 2021/22 year, concluding what proved to be a very complex undertaking. Rainfall and river flow conditions were very good across the Murray-Darling Basin throughout the season with sustained modest unregulated flows over this period and the 6 months prior (and continuing into 2022/23). These conditions allowed for the implementation of the most complex suite of hydrological manipulations ever planned and attempted along the South Australian portion of the River Murray. This included the concurrent watering of three major floodplains (Chowilla, Pike and Katarapko), associated weir pool raising operations, attractant flows over the barrages and flushing flows for the Murray Mouth, as well as our regional suite of pool connected wetland manipulations and our annual Commonwealth Environmental Water Office (CEWO) pumping operations. All of the planned operations were implemented effectively, in essence creating conditions similar to those that might normally reflect a 60,000+ ML/day seasonal flow pulse, on the back of a 30,000+ ML/day flow in real terms. This endeavour was challenging to deliver, requiring environmental water modelling and allocation negotiations on many levels, as well as continuous operational adaptation.

As part of DEW's \$38 million Sustaining Riverland Environments (SRE) program, staff finalised work on the development of two wetland management plans. The completion of plans for the Beldora and Bookmark Creek sites has established a critical measure for the future management of these water bodies and provided a template for DEW to proceed with development of wetland management plans for other sites.

Work was commenced in earnest in relation to the externally funded Weed Warriors of our Waterways and Healthy Rivers projects. Resourcing was established, mapping has begun using purpose built tools and landholders notified of the opportunities available to them. Terrestrial weed control commenced and aquatic weed mapping initiated, with staff identifying that current and predicted high flows may impact weed access, triggering early consideration of contingencies.

Quarterly Program highlights

- Implementation of environmental watering was completed for the 2021/22 year, completing what proved to be a very complex undertaking.



Photo 15. Kat Creek floodrunner - south bank breaching in time for high flows.



Photo 16. Wiela Bank breaching.

- A watering proposal has been submitted to the CEWO for their approval to apply 12,000ML water to priority sites in SA in 22/23. Pumping is anticipated to start later than usual due to the wet season and the work planned will support delivery of SRE projects.



Photo 17. Katarapko Creek Regent Parrot floodrunner pump start.

- Planning is underway for a tri-state small bodied fish forum to be hosted by the landscape board at Currency Creek in October. Around 70 participants, plus funding partners, are likely to attend, which is expected to result in an abundance of expertise addressing environmental directions for our region.

- As part of DEW's \$38 million Sustaining Riverland Environments Program, wetland management plans were completed for Beldora and Bookmark Creek sites.



Photo 19. Nikalapko - Great Cormorant nesting.



Photo 18. Lucy Carlile from CEWO on Markaranka kayak tour.

- **River Weeds - Weed Warriors of Our Waterways project (Landscape Priority Fund)**

With the majority of project planning well underway for the Weed Warriors of Our Waterways project, quotes have been sought for equipment purchases that will help better deliver on-ground works. Darcy Peters has been engaged to develop specialised mapping tools for external contractors and staff to quickly survey multiple weeds across parcels within the project area, and record the control work they undertake. African boxthorn in the Ponde area has been mapped with the intent to break the back this large contiguous infestation. Landholders in the Ponde area continue to be notified about the project and its intentions to carryout some work on private land with the aid of funding. This has so far been well received by landholders.








African boxthorn control work has already commenced on the levee bank at Ponde targeting heavily infested areas that landholders cannot manage. This work will provide good in-roads to engage land managers in the program. Staff also discovered large boneseed plants growing on the riverbank which are undoubtedly a significant local seed source for control. Landholder engagement will continue here to provide education about summer weeds to look out for and how best to apply control.

Winter river surveys will start in late June with a focus on African boxthorn and opuntia cactus. Mapped data will be used to formulate a plan to return and spray plants from the boat. Large infestations accessible by land will be sprayed by contractors. Inspections will be the focus during July and August.



Photo 20. Community engagement plays a large role in the work of district staff. Signage about golden dodder, a priority species for the Weed Warriors of our Waterways project, was erected at boat ramps across the Riverland district, encouraging community to report sightings.

Progress on program strategies

Program Strategies	Focus Areas*	Status
Survey and control aquatic and terrestrial weeds impacting the river corridor environment.	5	
Identify and map priority boneseed sites along river corridor.	5	
Survey, control and monitor Murray River and associated creeks and wetlands.	5	
Plan, negotiate, implement and monitor the delivery of Commonwealth Environmental Water Office (CEWO) environmental water to targeted floodplain wetlands along the River Murray.	1	
Plan, coordinate, guide and monitor the hydrological profiles of managed pool-connected wetlands along the River Murray.	2	
Engage the community and stakeholders in wetland planning, management, monitoring and learning opportunities around wetland environments, wetland management and on the nature, value and use of environmental water.	4	
Plan, implement and support key wetland threatened species initiatives with the involvement of community and stakeholders.	3	

*Refer to Appendix 1

Legend  = On Track,  = Not Started,  = Behind Schedule,  = Completed



Healthy natural landscapes

Program investment

Program	Levies	External	Total
Landscape Scale Restoration	370,929	700,000	1,070,929
Restoring Iron grass Grasslands	-	625,531	625,531
Threatened Mallee Birds	-	315,055	315,055
Pest plant and animal management	222,660	-	222,660
Program Support	276,342	54,847	331,189
TOTAL	869,931	1,695,433	2,565,364

Program investment as per the 2021-22 Murraylands and Riverland Business plan.

Progress Summary

Positive ecological change takes time and the foresight, patience and perseverance of staff and their collaboration with other has fostered positive outcomes over the last period. Restoration work undertaken by staff to removing dams led to reduced grazing pressure on the landscape and, coupled with the recent La Nina weather system, has resulted in strong regeneration of vegetation cover on the disturbed soil of the dam sites. This is very encouraging for the future and this work will continue with a view to leveraging these results.

Support has been provided to a number of engaged community enthusiasts, eager to improve their landscapes. Staff have worked with groups at various locations, including Bonney Reserve, Gluepot Reserve, Tiliqua Nature Reserve, Murtho, Hallett and Tailem Bend covering a range of interest areas.

Activities have ranged across a broad spectrum, encompassing awareness raising, site advice, on-ground works, best practice pest management, revegetation and seed trials. Collaboration and engagement is critical in maximising outcomes and the last period has seen great progress in these directions.

Quarterly Program highlights

- **Working together at Bonney Reserve**

On the April 21 2022 Nicola Barnes (grassland ecologist) and Kate Graham (restoration ecologist) visited Bonney Reserve with Bec Gould (district officer). The focus of the visit was how to improve the condition of the low vegetation between the Coorong and the block of mallee woodland to the east. This is a naturally occurring low open vegetation type that adds to the value of the mallee woodland by providing a different type of habitat for native fauna and flora. These transition zones between vegetation types are important for the biodiversity of an area as native fauna have a greater variety of resources to use. Native flora information was provided to Bec Gould so that she will be better able to support the custodians of the reserve in their efforts to improve the native vegetation.

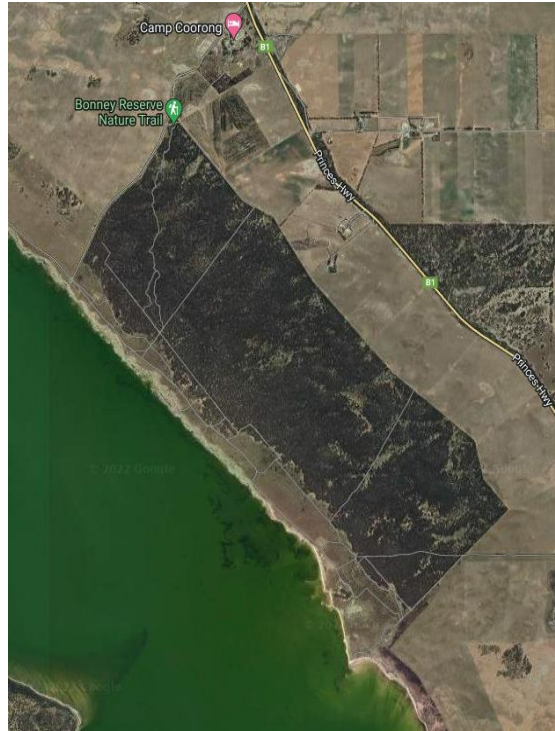


Photo 21. Map of Bonney Reserve visited by Nicola Barnes, Kate Graham and Bec Gould.

- **Adaptive Management of Fox Control for Biodiversity at Gluepot**

On April 30 2022, senior ecologist Craig Gillespie attended a working bee weekend at Gluepot Reserve to give a presentation at their dinner. The presentation was on an analysis of data collected from the Malleefowl Adaptive Management Predator Experiment conducted partially on Gluepot by the landscape ecology team. Having seen the presentation and adjusted their predator control efforts in response, the Gluepot Management Committee invited Craig to return and deliver the presentation to the volunteer base to demonstrate the value of their work in both carrying out reserve management activities and also capturing and documenting the related data.

- **Bulldozers for Conservation Four Years On**

The Threatened Mallee Bird Project funded by the Australian Government through Regional Landcare Partnerships has been decommissioning pastoral dams on the South Olary Plain for four years now. From 2022, the project will be complemented by the Living Landscapes Project to close additional dams. The purpose of this work is to reduce grazing pressure across the landscape to allow threatened mallee bird habitat to regenerate. During this time, a La Nina climate system has resulted in wetter than usual conditions. Combined with the reduced grazing pressure, this has resulted in strong regeneration of vegetation cover on the disturbed soil of the dam sites. Some of the earliest closed dams are showing very encouraging signs for the future.



Photo 232. Little Oak Dam, Danggali Conservation Park before works in February 2019.



Photo 223. Little Oak Dam bulldozed flat; May 2019.



Photo 244. Little Oak Dam showing a good diversity of native salt-bushes regenerating and providing significant vegetation cover; April 2022.



Photo 25. A fair diversity of native saltbush species have re-colonised Little Oak Dam since being flattened in 2019.



Photo 25. Regenerating saltbush accumulating topsoil by catching windblown sand, shedding seed to start the next generation and provide food for invertebrates. Ecological function returning step-by-step.

- Threatened Mallee Birds Surveys – Billiatt Conservation Park and Wilderness Protection Area**

On the April 26 2022, threatened fauna ecologist Melissa Burford began the first lot of bird surveys in Billiatt Conservation Park and Wilderness Protection Area. These surveys will contribute to the Threatened Mallee Bird Project which aims to improve the conservation management of declining mallee birds in the southern Mallee parks located in south-eastern Australia and western Victoria. These include Wyperfeld National Park, Big Desert State Forest, Big Desert Wilderness Park, Ngarkat Conservation Park, Billiatt Conservation Park/Wilderness Protection Area, Murray Sunset National Park, Nowingi State Forest, Hattah-kulkyne National Park, Annuello Flora and Fauna Reserve, Bronzewing Flora and Fauna Reserve and Wathe Flora and Fauna Reserve. These parks represent the southern-most range for many declining mallee bird species and will become increasingly important for species conservation in coming years. In order to develop effective conservation management for these declining species we require an understanding of species population sizes, locations of important habitat/sub populations and species post fire requirements. Extensive bird surveys in Billiatt Conservation Park/Wilderness Protection Area have not occurred since the fire in 2014.



Photo 26. Photo courtesy of: Debra Hopton – Two Striated Grasswren photos from Billiatt 2022 surveys.

For these surveys we worked with Darcy Peters to develop two field apps to assist with site navigation and data collection. These apps greatly improved work flow and will be utilised to survey the other southern Mallee parks as part of the larger Threatened Mallee Bird Project.

The surveys ran for 4 weeks and we recorded a number of threatened Mallee bird species including the striated grasswren, red-lored whistler and the mallee fowl. In addition we managed to record over 200 opportunistic records such as goats, kangaroos, mallee fowl mounds etc.



Photo 27. Photo courtesy of: Debra Hopton – red-lored whistler from Billiatt 2022 surveys.



Photo 28. Photo courtesy: Elizabeth Warnock – mallee fowl mound.

- On June 28 and 29 2022, direct seeding of an important corridor for the regent parrot began on Cal Lal Road in Murtho. This venture was a partnership between the board, two landholders (also almond growers), the Regent Parrot Recovery Team and Trees for Life. This project is a three year partnership which aims to connect the river to a patch of remnant mallee vegetation. Mallee vegetation has been shown through our previous tracking work to be vital for foraging and roosting for this species. Whilst regent parrots can travel large distances in a short period of time in search of food (up to 30 km in an hour and 15 km per hour on average), our data has shown that they tend to follow vegetated corridors and are relatively reluctant to fly over more open land, likely due to the heightened risk of predation. Therefore connecting and providing safe flight paths for regent parrots to access Mallee habitat is essential. This project will provide a 6 km long, 100 m wide corridor, made up of a mix of foraging and native habitat species. In turn, this will provide important connectivity from breeding habitat along the river to mallee foraging habitat

- Sixty hectares of the Tiliqua Nature Reserve (owned by Nature Foundation) has been targeted for strategic re-introduction of the key habitat plant, iron-grass (*Lomandra multiflora ssp. dura*). This property lost all iron-grass due to over-grazing, but retains cover of a low diversity of native grassland plants, predominantly spear-grasses (*Austrostipa ssp.*). This is a highly suitable site due to its restoration potential and security, given its primary objective is nature conservation. It also hosts a significant population of the critically endangered pygmy blue-tongue lizards. Planting was undertaken during a community event.



Photo 29. Participants in the iron-grass planting day at Tiliqua Nature Reserve June 2022.

We collaborated with Nature Foundation, Mid Murray Landcare SA and the Northern and Yorke Landscape Board to promote the event and all contributed to the day, including water cart, planting tools and catering. We also included talks by experts on the project, the ecology of the site and its value as a conservation reserve owned by Nature Foundation.



Photo 31. Aimee Linke (Mid Murray Landcare SA) showing the volunteers how to plant tubestock.



Photo 302. Nicola and Kate talking about the iron-grass native grassland project in the Tiliqua shearing shed.

- The iron-grass native grassland project team has continued its efforts to increase communications, with much valued support from our internal media and communications team. Over the past 6 months, we have generated 16 communication materials, celebrating and informing the community about our grassland project, field work and plant vouchering activities, advertising field days and workshops and raising the profile of this threatened ecological community on key dates including World Environment Day and the International Day for Biological Diversity. As usual we have well exceeded our targets to engage on-on-one with the community, with 61 personal interactions in this period. We love talking to farmers, conservationists and our First Nations community.

NATIVE GRASSLAND PROJECT

Presenting two Field Days

Field Day 1
Grassland Seeding Sites and Grazing Management Trials.
 Come along and see these exciting trials. Meet the landowners and project team to discuss the different grassland revegetation and grazing methods being implemented on these two properties.

30 March 2022, Wednesday
Terowie and Ullaloo
2-6pm BBQ Dinner Included
[register here for this event](#)



Field Day 2
Grassland Seeding Sites and Grazing Management Trials.
 Come along and see this trial site. This is your opportunity to discuss the value of irongrass grasslands with the land owners and learn how they manage these systems.

31 March 2022, Thursday
Truro
4-6pm BBQ Dinner Included
[register here for this event](#)

For more information and location maps contact Anne Brown 0409 684 312
annebrown@westnet.com.au or Almee Linke 0427 590 344

"Have you recently spotted a plant you don't recognise? Bring a photo with you and we'll help you identify it!"



The project is supported by the Murrumbidgee and Riverland Landscape Board and the Northern and Yorke Landscape Board through funding from the Australian Government's National Landscape program and the landscape levies.

Photo 33. Communication material inviting people for two project field days.

- A significant part of our iron-grass native grassland project is maintaining and monitoring the 15 trials we have set up over the past few years - including 6 grazing and seeding trials, 6 revegetation trials, a kangaroo and rabbit exclusion trial and our original sheep grazing and slashing trial at Poonthie Ruwe Conservation Park. These trials span from Terowie down to Taillem Bend and include Hallett, Eudunda, Truro, Keyneton and Cambrai. We are also monitoring 10 additional native grassland sites annually and measuring changes in the types of plants in these grasslands. With one year of this project left, we are about to turn our focus to communicating the results of all our work over the past 4 years.
- Expert botanist Ann Prescott officially identified the plants that were collected for the iron-grass native grassland project in spring 2022, to lodge with the State Herbarium. Two great finds (species not previously recorded during our surveys) were *Austrostipa tenuifolia* (narrow-leaf spear-grass) (rare in both South Australia and nationally) and *Austrostipa stuposa* (fibrous spear-grass) which was thought to be regionally extinct.
- **Cost Recovery Work - DIT Highways (state and federal roads), DIT Rail and OneRail**
 Olive control was completed along DIT state and federal roads and highways. The contractors utilised had extensive experience with olive control and the various methods utilised for control will be monitored to evaluate the effectiveness on the olive populations. This will help inform future control methods. Controlling roadsides will reduce the population and benefit the areas that are not as yet infested, including nearby conservation parks, woodlands and heritage scrub. This work will also be complemented by works on olives on adjoining local council roadsides, funded through levy.



Photo 314. Olive tree drilled and filled near White Hill.

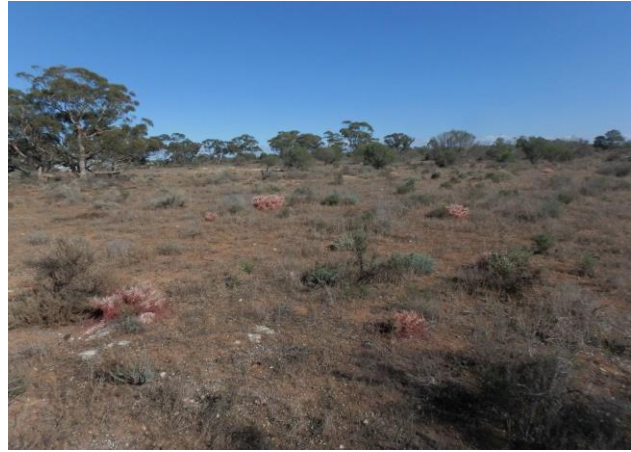


Photo 35. Sprayed hudson pear at Sunnydale.

- **Hudson Pear Eradication project**

Hudson pear control at Devon Downs extended across three private properties that were patrolled, mapped and treated by a team of 5. As many as 267 individual plants were found and treated within the control area. A further two outlier plants were later found after thorough searching. A fourth property where hudson pear was viewed from across the fence has not been treated as the landholders have not responded to our communication.

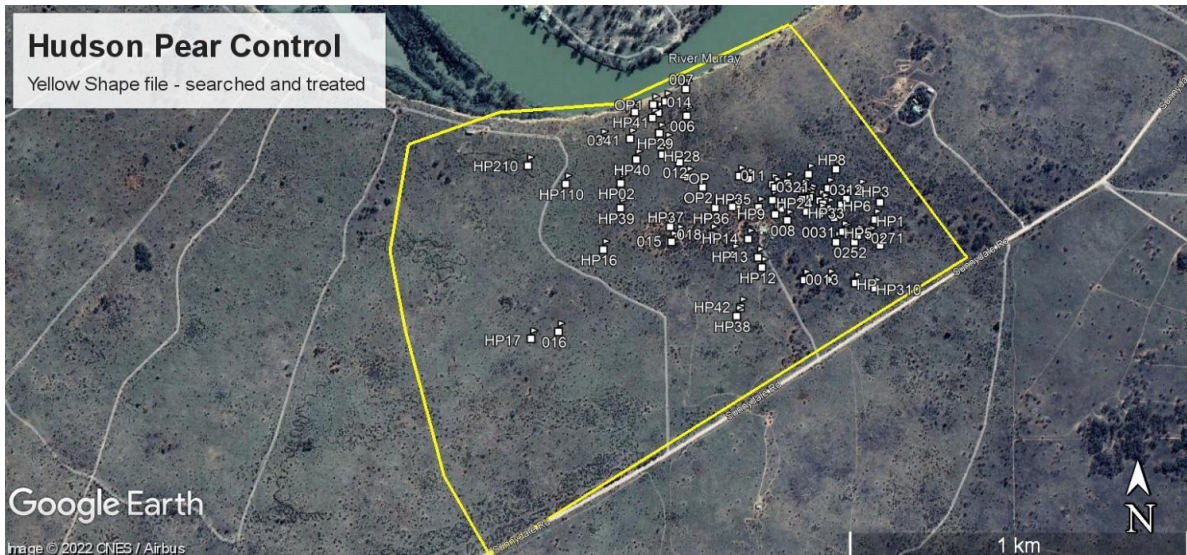


Photo 32. Hudson pear plants treated on property at Sunnydale.

Progress on program strategies

Program strategies	Focus Areas*	Status
Continue to decommission former pastoral dams across the South Olary Plain project area.	5	😊
Set up trials to investigate different restoration techniques to restore function to the South Olary Plain.	3	😊
Collect and store native seed for use in restoration actions.	4	😊
Facilitate working group to deliver coordinated monitoring effort and direct herbivore control to reduce total grazing pressure to the South Olary Plain.	1	😊
Undertake priority actions to address the conservation of threatened flora, namely targeted threat abatement activities to maintain momentum on the conservation of a few key flora species.	5	😊
Choose and protect a key biodiversity hotspot (e.g. Jutland precinct, Prospect Hill or the Monarto complex) through implementation of restoration activities to ensure the gains from previous investment in restoration are retained and capitalised upon.	3	😊
Create and maintain seed production areas.	4	😊
Use seed from wild harvest and seed production areas to seed into degraded areas and improve plant species diversity.	3	😊
Set up trials to investigate the impacts of pulse grazing and resting periods.	1	😊
Improve the understanding of the role of fire in threatened bird and plant conservation across the Living Landscapes project area and Billiatt Conservation Park.	2	😊
Contribute to fire planning to ensure the best ecological outcomes from the prescribed burn program and CFS fire planning.	5	😊
Undertake strategic herbivore control in conjunction with the wetland team and district officers.	1	😊
Undertake monitoring of malleefowl and black-eared miners, and other species as identified.	5	😊
Support ongoing pest animal management activities in emerging areas.	1	✅
Monitor invasion pathways and control pest plant and alert species.	6	✅
Identify and map priority boneseed sites across key areas of the Murraylands District.	6	✅
Manage of priority African Boxthorn infestations through landholder engagement and education, roadside and property notices, community education and media campaigns.	6	✅
Undertake works to destroy infestations of bridal veil and hudson pear across the Murraylands district.	6	✅
Recover costs for works delivered for external agencies.	6	✅
Assist landholders to control priority pest animals including rabbits and goats.	6	✅
Assist landholders to control priority pest weeds.	6	✅

*Refer to Appendix 1

Legend  = On Track,  = Not Started,  = Behind Schedule,  = Completed



People at the heart of landscape management

Program investment

Program	Levies	External	Total
Grassroots Grants	333,289	-	333,289
Education Program	297,429	-	297,429
Aboriginal Partnership Program	348,291	319,769	668,060
Capacity Building and volunteer support	169,971	-	169,971
Citizen Science	128,625	-	128,625
Program Support	592,953	-	592,953
TOTAL	1,870,558	319,769	2,190,327

Program investment as per the 2021-22 Murraylands and Riverland Business plan.

Program Progress summary

The landscape board and its staff have been busy this quarter running the assessment and grant agreement processes for the 2022-23 Grassroots Grant program to ensure new projects could start on the July 1 2022. A total of 30 projects totalling \$341,000 have been approved for funding in 2022-23.

The education team continues to work with young people to build their understanding of landscape management. Term 2's theme was 'Healthy Natural Landscapes' and the program's events focussed on mallee ecosystems and threatened mallee species.

The 2022 River Murray Youth Council program began with record interest, 25 high school students from across the region participating. The youth council came together in Karoonda in April for a planning session to set the priorities and program for the year and begin their leadership program with mentor Ian 'Wally' Walton.

Regular meetings with our First Nations partner groups were held across the region as a key part of the board's engagement process. This quarter staff also improved their cultural awareness and competency through the delivery of cultural awareness training by First Nations for staff in Berri and an all staff day cultural tour of Ngaut Ngaut Conservation Park.

The citizen science 1 Million Turtle project was involved with a series of yarning circles organised through the Ngarrindjeri Aboriginal Corporation. These 6 events brought elders and younger community members together to talk about what they remember about turtles from when they were young, stories they had heard others tell, cultural connections and what they would like to see happen in the future to protect turtles.

The Find Our Fungi project has 10 new species for people to look out for in the drier Mallee areas and contribute their sightings to Fungimap. A new fungi poster and stickers have been produced highlighting the new species and the Funky Fungi Walk and Talk was held in Berri, with the assistance of Dr Teresa Lebel from the Botanic Gardens and Richard Walsh from DEW sparking great community interest.

Finally two volunteer recognition events were held, one near Murtho and one at Wellington, in May. These events celebrated and recognised the impact of and contributions by 75 volunteers.

Quarterly Program highlights

- What better way to celebrate and thank a precious person than to give them the gift of a precious threatened plant? As part of this year's Precious Plants for Precious People program, more than 1,000 threatened silver daisy-bush seedlings were provided to primary school students across the region to give as a gift to a special person in their lives. Timed to coincide with Mother's Day, the program also included running threatened plant education sessions at 26 local primary schools. The Precious Plants for Precious People Program is always a huge hit with schools and helps the board to raise awareness of the region's threatened flora with young people and their families.



Photo 36. 2000 threatened plant seedlings were given out across the region as part of this year's Precious Plants for Precious People program.

- Term 2 Young Environmental Leaders (YEL) forums focussed on the board's priority of Healthy Natural Landscapes by investigating mallee ecosystems and threatened mallee species. The Murraylands YEL was held at Yookamurra Sanctuary near Cambrai and the Riverland YEL was run at Banrock Station. In total 77 primary school students from 13 schools across the region attended the YEL forums. Students were involved in a range of fun and exciting activities and left armed with the knowledge and skills to help make a difference back in their schools and communities.



Photo 33 Helen Crisp from Yookamurra Sactuary presenting on mallee ecosystems at the term 2 Murraylands Young Environmental Leaders forum.

- Three teacher professional development (PD) sessions were run during the last quarter of the year to empower and inspire teachers to bring landscape management into their classes and schools. At the end of term 1, a session on sustainable water use was held in Murray Bridge including a visit to a local irrigation property and presentations on water planning across the Murray-Darling Basin, sustainable irrigation, innovation education opportunities in the dairy industry, and education programs and resources relating to sustainable water use in agriculture.



Photo 38. Teachers discussing sustainable water use at an irrigated property.



Photo 39. Presenters at the term 2 Murraylands Healthy Natural Landscapes teacher professional development session in Murray Bridge.

- This year's River Murray Youth Council (RMYC) program is bigger and better than ever! With 19 new registrations, a total of 25 high school students from across the region have stepped up to find out more about our local landscapes, get actively involved in a range of hands-on activities, and develop valuable leadership skills.
- In late April the group came together for a planning day in Karoonda. Facilitated by mentor and leadership trainer Ian 'Wally' Walton, the day included getting to know each other, team building, and identifying the group's priorities for 2022.

In term 2 the group met at Martin Bend in Berri for an activity day to learn about native fish, First Nations culture and traditional hunting and fishing techniques, enjoying a scenic walk identifying native species, and fishing along the bank.



Photo 340. The River Murray Youth Council at their activity day in Berri.

This year RMYC members are also helping to run the Young Environmental Leader forums for primary school students. Kids teaching kids is a powerful way to educate and helps develop the RMYC members' confidence, knowledge and leadership skills.

- The landscape board's education program is building a strong partnership with the Murray Bridge High School. In June wetland ecologists Connor and Aleisha attended a year 12 Earth and Environmental Science excursion to Long Island Reserve. They gave an overview of the River Murray

and its wetlands, explained their roles as ecologists (and their career pathways into those roles), and discussed the students' individual independent research project ideas.

The education program is also working with the school to support the integration of landscape management issues and priorities into the schools program. During term 2 the school developed a teaching plan on River Murray turtles for science and literacy, based on education resources developed by the landscape board.

A big thanks to teacher Serena Werner for all her work bringing in landscape management into the school and for her support and feedback in the design and development of the education program's resources.



Photo 41. Year 12 Earth and Environmental Science students from Murray Bridge High School meeting with landscape board ecologists at Long Island Reserve. Photo: Serena Werner.

- The River Murray and Mallee Aboriginal Corporation (RMMAC) ranger team started in mid-March 2022. Since then the team has been busy with a range of activities including training (heritage, chainsaw use and maintenance, and fencing), meeting with various stakeholders, developing heritage conservation plans, undertaking Aboriginal Waterways Assessments, mapping culturally significant species, working with Flinders University on a cultural heritage investigation along the River Murray cliffs, and delivering cultural education sessions to Riverland schools. The project is a proud partnership with RMMAC and is funded by the National Indigenous Australians Agency (NIAA) and the Landscape Priority Fund.



Photo 42. The River Murray and Mallee Aboriginal Corporation Ranger Team undertaking fencing training at Gerard in the Riverland.

- Freshwater turtles are important species for First Nations groups along the River Murray. In June a major collaborative project engaged 45 Ngarrindjeri community members in a series of six yarning circles at Murray Bridge, Tailem Bend, Wellington, Meningie, Raukkan and Goolwa. At these events local community members came together with landscape board staff (First Nations partnerships and citizen science), DEW staff, and leading turtle researcher James Van Dyke to discuss Ngarrindjeri knowledge of turtles and talk about opportunities for the community to get involved in turtle conservation. The project was led by the Ngarrindjeri Aboriginal Corporation in partnership with the Murraylands and Riverland Landscape Board, the Hills and Fleurieu Landscape Board, the Living Murray Program and the 1 Million Turtles Program.



Photo 43. Participants at the Tailem Bend Ngarrindjeri turtle yarning circle in June.

- In May members of the landscape board met with the River Murray and Mallee Aboriginal Corporation (RMMAC), the Australian Landscape Trust (ALT) and their ranger teams, at Calperum Station in the Riverland. It was a fantastic opportunity for everyone to meet and find out more about the Riverland Rangers program and the amazing ecological and educational work happening at Calperum. The Riverland Rangers Program is a partnership between the landscape board, RMMAC and ALT, and is funded by the National Indigenous Australians Agency (NIAA).



Photo 44. Board staff members meeting with the River Murray and Mallee Aboriginal Corporation, the Australian Landscape Trust and their ranger teams at Calperum Station in May.

- In June a forum on threatened mallee birds was held with the First Peoples Working Group, the River Murray and Mallee Aboriginal Corporation (RMMAC) ranger team, and the Gerard Country Rangers. The forum focussed on recent projects and research on nationally threatened mallee emu-wrens and regent parrots, and explored opportunities for First Peoples' community members and ranger teams to become involved in future conservation efforts. As a result of the forum the RMMAC ranger team attended a Trees for Life direct seeding program near Murtho which is re-establishing native vegetation corridors for regent parrots. The forum was part of the Regional Land Partnerships project 'Improving habitat viability and other recovery actions for EPBC listed Mallee woodland birds'.



Photo 45. The First Peoples Working Group, RMMAC Rangers and Gerard Country Rangers at a threatened mallee birds forum in Berri in June.



Photo 46. Murraylands and Riverland Landscape Board staff attending a cultural tour of Ngaut Ngaut Conservation Park as part of the 2022 all staff day.

- As part of the landscape board's commitment to reconciliation and cultural awareness, a recent all staff day included a guided tour the rock shelters and rock art at Ngaut Ngaut Conservation Park on the River Murray near Nildottie. Staff had a fantastic time learning about local First Nations culture, values and history from Ivy and Sam from the Mannum Aboriginal Community Association Inc.
- Three new school-based trainees have started working with ZoosSA as part of the Monarto Safari Park Aboriginal Learning on Country (ALOC) program. The trainees, from Murray Bridge High School, are studying Conservation and Ecosystem Management and working on a range of conservation and sustainable production projects. The Monarto ALOC program started in 2010 and since then 26 trainees have been involved, with a number continuing on as on-going ZoosSA staff. The program is proudly supported by the landscape board and the National Landcare Program.



Photo 47. The Monarto Aboriginal Learning on Country Project has employed 3 new school-based trainees to study Conservation and Land Management and gain practical work experience at the Monarto Safari Park.

- A key achievement for the Grassroots Grants program this quarter was the successful technical and strategic assessment processes, the final assessment workshops, and the timely completion of new grant agreements prior to the end of the financial year.
- A masterclass workshop hosted at Raukkan was delivered in collaboration by PIRSA and district staff. The event was well attended by individuals from Raukkan Aboriginal community, Ngarrindjeri Lands and Progress Association and Coorong National Park. Sessions focussed on introducing an array of tools and techniques available to control declared pest plants and animals, particularly deer, foxes, rabbits, wild dogs, African boxthorn, invasive grasses, as well as weedy acacia species. The event stimulated constructive conversations about pest plants and animal issues experienced on country and was well received by participants.



Photo 48. PIRSA masterclass held at Raukkan/Narrung was well attended by crew from Raukkan, Ngarrindjeri Lands and Progress Association, and National Parks.



Photo 49. Conway Johnson delivering the baitlayer training session at the PIRSA masterclass at Raukkan.

- TAFE SA students studying the Diploma of Conservation and Ecosystem Management visited Mowantjie Willuwar Conservation Park to undertake in-field learnings about collecting data and defining pest problems on-site. Working closely with education officer Ilyth Burton, district officer Bec Gould supported the field trip by sharing knowledge of pest plants and animals, their impact and control in the region. Students were introduced to signs and impacts of rabbits, African boxthorn and African lovegrass plants, and were rewarded by finding greenhood orchid rosettes that are likely to be the threatened sandhill greenhood orchid *Pterostylis arenicola*. This particular TAFE SA class is based at Urrbrae and the field trip was seen as a good opportunity for students to experience pest plant and animal issues regionally to gain a better appreciation for their impact on the landscape and its landholders.



Photo 50. TAFE SA students in Mowantjie Willuwar Conservation Park learning how to survey an area for weeds and pest animals.



Photo 51. TAFE SA students learning how to survey rabbit warrens in Mowantjie Willuwar Conservation Park.

- The Find Our Fungi project has 10 new species for people to look out for in the drier Mallee areas and upload to Fungimap. A new fungi poster and stickers have been produced highlighting the new species. A Funky Fungi Walk and Talk was held in Berri with the assistance of Dr Teresa Lebel from the Botanic Gardens and Richard Walsh from DEW. This has been a great collaboration between the landscape ecology, citizen science, communications and education teams, and was supported by DEW experts, and volunteer experts Pam and David Catcheside, building on an idea that began with Jasmin Packer from Fungimap/Adelaide University.



Photo 52. New Find Our Fungi stickers and poster.



Photo 353. New Find Our Fungi resources being snapped up at Funky Fungi Walk and Talk, Berri.

- The [Waterwatch SA BioCollect](#) data portal is now up and running for 3 landscape regions with the first round of water quality data reported by citizen scientists.. This new site allows Murraylands and Riverland, Hills and Fleurieu and Northern and Yorke regions to each have their own portals whilst using similar survey designs so that all data can be combined if needed. This platform is consistent with those used by NSW and ACT Waterwatch networks. Some work is still required to allow us to incorporate historical data.

- Citizen science was a proud partner with First Nations partnerships and DEW in a series of 6 turtle yarning circles with the Ngarrinjeri community organised by the Ngarrindjeri Aboriginal Corporation (NAC). Dr James Van Dyke, project lead of the 1 Million Turtles Project, took part in the conversations and share his scientific knowledge. Having a yarn prompted the sharing of many turtle stories by the elders which gave us a picture of how things have changed for turtles in the river and lower lakes and what might have caused their numbers to decline.








Photo 54. Talking Turtles at Wellington Yarning Circle.

The opportunity for younger community members to join the circles and hear from the elders lead to a broad consensus that everyone wanted to see turtles nesting and hatching on the banks again. Many good ideas regarding how this could be achieved were surfaced and will form future plans of action.

Progress on program strategies

Program strategies	Focus Area*	Status
Establish and maintain regular engagement mechanisms with First Nations groups.	2	☑
Support landscape board programs, projects and staff with First Nations engagement including heritage risk management, ILUA processes, project delivery, cultural values assessment and monitoring, planning and meeting mandatory employment/procurement targets.	2	☑
Facilitate and support First Nations' participation in landscape management including employment and capacity building programs.	2	☑
Support cultural awareness and competency development of the board, its staff, and partners.	2	☑
Build and maintain strategic partnerships with, and between, stakeholders to support First Nations engagement.	1	☑
Deliver an effective, efficient and community-friendly Grassroots Grants funding program.	5	☑
Support Grassroots Grants projects that build community knowledge, skills and participation in landscape management.	4	☑
Manage the Grassroots Grants program.	5	☑
Provide advice and support to landholders regarding best practice pest plant and animal control.	4	☑
Support community-led pest plant and animal management actions and projects across all five landscape board priorities.	5	☑
Support landholders and provide best practice advice to manage pest plants and animals across the landscape, including one-on-one advice.	4	☑
Build the Murraylands and Riverland Landscape Board citizen science network through partnerships and community engagement and training.	1	☑
Deliver the Waterwatch program, support volunteer water quality data contributions and run Marne and Saunders Waterbug Bioblitz.	4	☑
Utilise citizen science platforms like FrogWatch SA and FungiMap to support other team and provide data and engagement for the region.	4	☑
Coordinate the 1 Million Turtles Community Conservation Program in SA.	4	☑
Recognise volunteer contributions to citizen science projects through showcase events and awards.	6	☑
Ensure volunteers have access to the infrastructure needed to contribute to citizen science projects.	6	☑
Support internal teams to integrate citizen science components into their projects.	4	☑
Work with schools to educate and involve young people and teachers in landscape management and leadership.	3	☑
Facilitate the River Murray Youth Council program.	3	☑
Engage young people into landscape management projects and activities (incl. work experience).	3	☑
Provide funding for field days and forums such as the Mallee Sustainable Farming event and the Mallee and Coorong Advisory Committee AgForum.	4	😊
Implement AgKnowledge grants processes, including development, approvals, assessments, management and reporting.	5	☑
Monitor CCW Improving Riverland Soils sites, grower engagement and extension of results.	4	☑

Program strategies	Focus Area*	Status
Extension of relevant project work and information and promotion of events and information.	4	
Coordinate the South Olary Plain project steering group and engage with relevant stakeholders and partners.	1	
Develop a citizen science project to increase knowledge of the regional distribution of fungi.	4	
Undertake monitoring of vegetation trial sites, interpret results and extend information to the community, including graziers.	4	
Support regional and national recovery teams for threatened mallee birds.	1	

**Refer to Appendix 1.*

Legend  = On Track,  = Not Started,  = Behind Schedule,  = Completed



Foundational programs

Program investment

Program	Levies	External	Total
Board leadership and governance	197,611		197,611
Planning and Evaluation	599,167	26,000	625,167
Customer and Business Services	114,359		114,359
Council levy collection fees	33,899		33,899
Communications	491,843		491,843
Program Support	667,119	233,597	900,717
TOTAL	2,103,998	259,597	2,363,595

Program investment as per the 2021-22 Murraylands and Riverland Business plan.

Progress summary

This quarter has seen a lot of works undertaken to progress the board to the 2022-23 financial year and beyond. The finalisation and approval of the board's 2022/23 business plan and operational budget was one of the highlights. Recruitment of new staff has continued with 7 vacancies advertised and 3 filled before the quarter finished. In addition, 6 staff recruited prior to or during this period commenced their roles.

Work continues to ensure office accommodation meets the changing needs of the organisation. Renovation work was undertaken at the Lameroo office to fix the roof to bring it up to the appropriate standard. A review on IT and communication technology requirements was undertaken to ensure equipment is appropriate for staff to undertake work in the most efficient and flexible manner.

Organisation and the public play a significant role contributing to the success of the landscape board. In May, we recognised the contribution of our volunteers holding two events near Murtho and Wellington.

The use of social media to spread awareness and promote the boards success continues to grow with 2000 facebook followers and one post having more than 13,000 views.

A literature review, webpage and factsheet about regent parrots and frost fans have been completed and shared with councils and the Department for Environment and Water.

Support continues for board grant programs including the launch of the Agricultural Knowledge Small Grants program and the establishment of a new media and communications guide for the Grassroots Grants program. After 3 years of providing support and coordination for the Ag Ex Alliance program, it drew to a close this quarter with very positive feedback from external stakeholders.

Quarterly Program highlights

- Renovations have been completed at the Lameroo office.
- MS Teams has been successfully implemented for outgoing calls.
- Two volunteer recognition events were held, one near Murtho and one at Wellington, in May. These events celebrated and recognised the impact of and contributions by 75 volunteers.



Photo 55. Murtho volunteer celebration - Kate Mason addressing the attendees.

- The Agricultural Knowledge Small Grants round was launched, noting a short timeframe and with one staff member absent.
- A new media and communications guide for Grassroots Grants recipients has been developed. Staff will support this with seasonal emails to grant recipients to remind them of approval processes, and to build a relationship in order to gather relevant content for social media.
- Social media performance has grown well in this quarter, with Facebook followers now over 2000 for the first time. One post in May received 13,000 views and was shared across third party accounts, resulting in a spike of activity.
- In-house development of acknowledgement guidelines for Landscape Priority Fund projects.
- The 2022-23 operation plan budget was approved by the board.
- 7 vacancies were advertised and 3 were filled.
- 6 new recruits started and 5 completed the Induction program.
- 97% of PRDs were completed.
- 23 contracts were issued.
- The new Gov SAfety Injury Management System went live on 16 May 2022.
- After 3 years of delivery, the Ag Excellence Alliance project piloting Warm and Cool Season Cover Cropping for Sustainable Farming Systems in SE Australia drew to an end. The administrative support provided and the successful collation and editing of many progress reports and the final report by our project officer (investment support) was highly praised by all project collaborators at the final

project workshop. This was the first time we had undertaken an administrative support role for an external project, and whilst many lessons were learnt about this delivery model it was also a very successful and enjoyable experience for those involved.

- The creation of the Murraylands and Riverland Landscape Board's 2022-23 Annual Business Plan was a highlight for our team this quarter. Feedback received from targeted stakeholders was very favourable, and their suggestions were presented to the board for consideration. The Annual Business Plan was accepted by the board at their May 2022 meeting and is now available on our website.
- A demonstration to the board and DEW staff regarding the apps available to streamline data management and collaboration to make the goat control aerial operations more efficient was very well received. This multi-agency collaboration is likely to gain momentum in the coming months and will deliver significant gains in accuracy and timeliness of data relating to the aerial operations, ensuring more accurate reporting and better data analysis leading to greater environmental outcomes and monitoring over time.
- The rubric for the sustainable water use priority was completed along with a definitions document and a data management plan. A definition document, rubric and a draft data management plan were developed for the healthy natural landscapes and healthy, lakes and wetlands priorities. Work has commenced on developing a rubric for the sustainable agricultural and pastoral landscapes priority with a definition document completed.
- Completion of regent parrots and frost fans literature review, creation of webpage and printable factsheet, then shared with relevant councils and DEW.



Photo 56. Frost fan factsheet completed and shared June 22.

- The Landscape Evaluation Framework for the Murraylands and Riverland Landscape Board was finalised and approved by board.

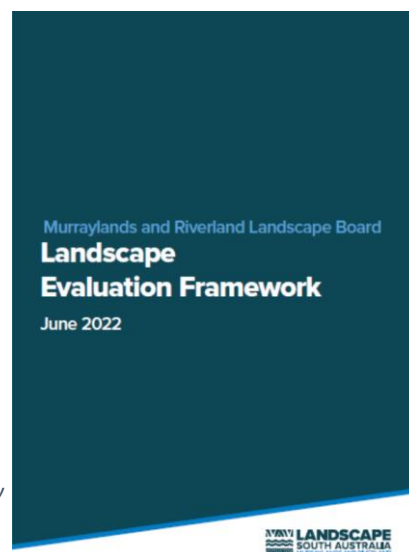










Photo 57. Evaluation Framework completed and approved by the Board.

Progress on program strategies

Program strategies	Focus Area*	Status
Provide a high level of customer service and administration services to both internal and external stakeholders.	7	
Undertake landscape board office relocations.	7	
Undertake landscape board office renovation.	7	
Undertake IT upgrades and procedure review.	7	
Undertake an MS Teams trial for desk-based phone calls (both internal and external).	7	
Provide executive support to the landscape board and its committees.	7	
Ensure the landscape board continues to meet the statutory board requirements through training, maintenance of registers and evaluating performance.	7	
Implement a regional communications strategy to build awareness of the landscape board and its work, and how the landscape levy contributes to the management of the region's landscapes.	5	
Oversee the management of landscape board and funding partner branding to maintain integrity and meet funding guidelines.	3	
Identify and monitor external projects through the finance system.	3	
Provide support to team leaders and executive leadership team for the financial management of their projects.	6	
Identify and monitor levy projects through the finance system.	1	
Manage transactional human resources management including administration, systems and reporting to achieve employment accuracy and staff satisfaction.	8	
Manage all aspects of Injury on Duty including Work Cover claims and Return to Work procedures as per legislation and to achieve staff satisfaction.	8	
Apply human resources policies and procedures as per legislation, commissioners' determinations, regulations, wards and enterprise agreements to meet legislative requirements.	8	
Provide appropriate human resources advice to all staff on request and provide strategic human resources advice and guidance to line management when required.	8	
Administrate levies collected by councils.	3	
Transition information management from DEW to Board ownership, maintaining legislative requirements and easy access for staff, whilst also improving information management in line with best practice.	4	
Implement geographic information systems (GIS) and support staff to collect and share location-based information and stories.	4	
Undertake annual business and operational planning.	1	
Provide grant management support for Grassroots and Ag Knowledge Grant programs, and provide administrative support for the Ag Excellence Alliance Mixed Cover Cropping partnership project.	3	
Launch and implement the landscape plan to guide business decisions.	1	







Program strategies	Focus Area*	Status
Facilitate the ongoing review and implementation of the business plan.	1	
Develop the Landscape Evaluation Framework to evaluate the delivery of the landscape plan and supporting business plan.	2	
Ensure the objectives of landscape board's policy and the regional landscape plan are promoted in responses to State Government policy and other referral matters.	3	
Enable the landscape board to deliver state and national reporting requirements.	3	
Build the monitoring, report and evaluation skills and knowledge of staff by providing technical advice, development of systems and coordination of evaluation activities.	2	
Manage and implement the Water Efficiency Program.	3	
Undertake bird surveys as part of the ongoing Landscape Assessment Framework.	4	
Deliver the Insect Investigators project for the South Australian Museum.	3	

**Refer to Appendix 1.*

Legend  = On Track,  = Not Started,  = Behind Schedule,  = Completed

3. Standard metrics reporting

The standard metrics are a defined and agreed short-list of measures the organisation counts for the purposes of communicating to the public and accountability to the executive leadership team and board members. These standard metrics quantify what has been delivered during the current quarter.

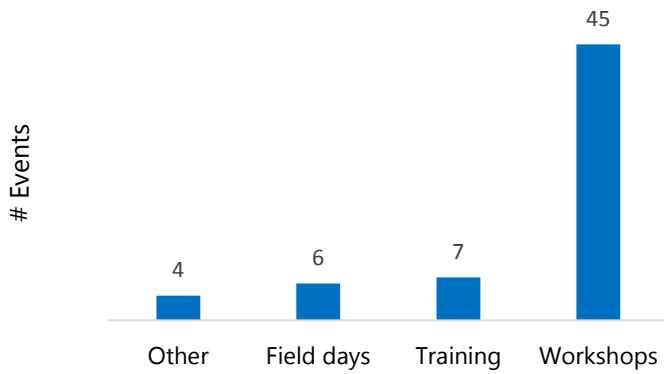
	Measure	Frequency							Q4 Actual
Events	#	Quarterly							62
Groups financially supported	#								34
Individuals engaged at events	#								773
Participants at recognition volunteer events	#								75
Partnerships	#								29
Schools supported	#								95
Schools actively involved in the education program									42
One-on-one technical advice interactions	#								328
On-ground trials / demonstrations established or maintained	#								15
Area benefitted from pest animal control	Ha								200205.9
Area benefitted from pest weed control	Ha								756.1
Land managers involved in coordinated baiting	Ha								49
Area surveyed	Ha								1241
Compliance issues investigated	#								2
Communication materials published	#								317
Radio/TV/newspaper interviews conducted	#								13
Followers on social media	#								5550
WAA permits received and processed	#								1
Development referrals responded to by landscape board staff	#							17	
Area of wetlands and surrounding floodplain water regimes managed	Ha	Annual							-
Area treated by fire management action	Ha								-
Priority threatened species and/or ecological communities supported	#								-
Volume of water returned to the environment	ML								-
Area covered by species recovery actions	Ha								-
Area of revegetation	Ha								-
Area covered by practice change	Ha								-
Treatments implemented to improve water management	#								-
External funds to levy funds	Ratio							-	

Note: The shaded boxes above represent which priorities make up the total number of the quarter for each standard metric

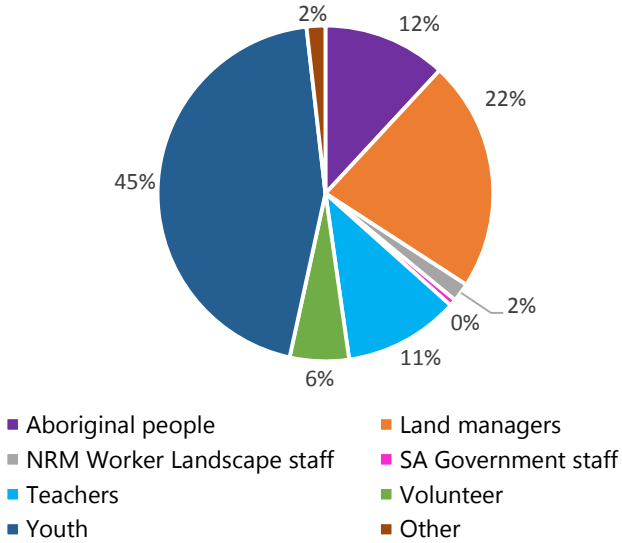
4. Stakeholder engagement

The landscape board seeks to engage with the community and diverse stakeholders through different activities, projects and media in order to work together towards long-term regional landscape outcomes. This section provides a summary of the stakeholder engagement during the current quarter.

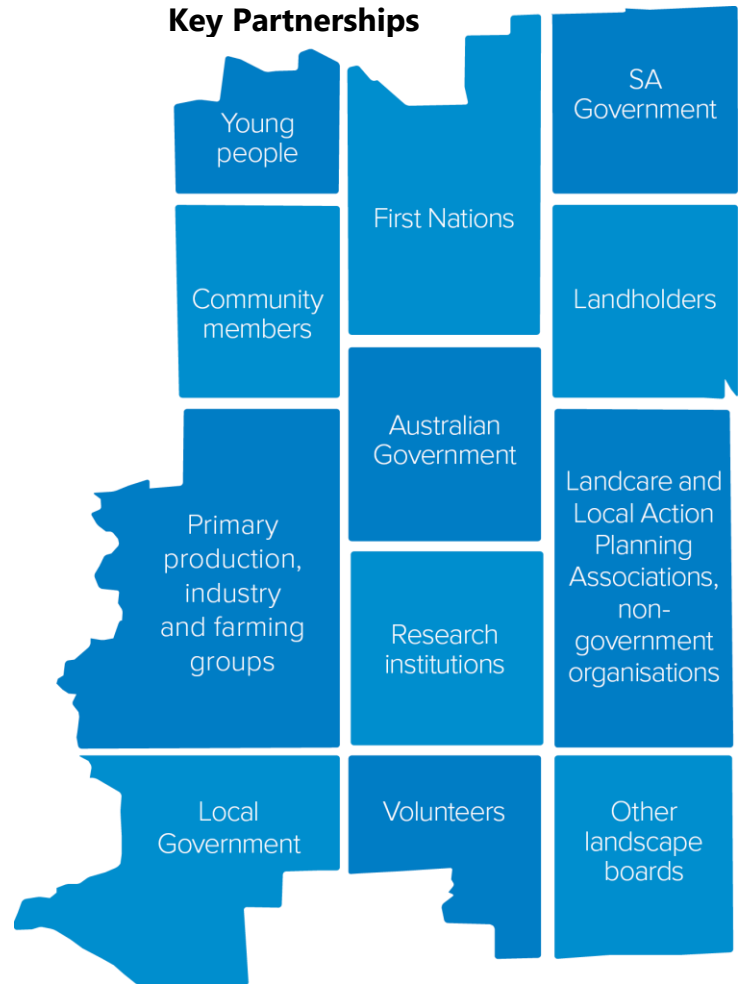
Type of events conducted



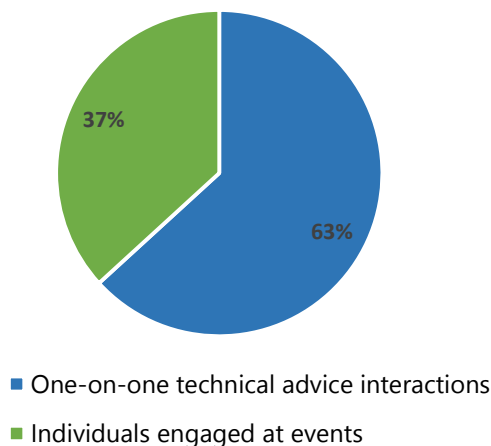
Individuals engaged at events



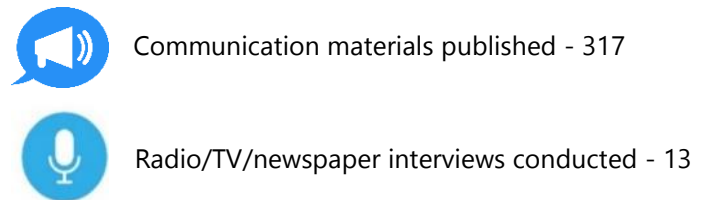
Key Partnerships



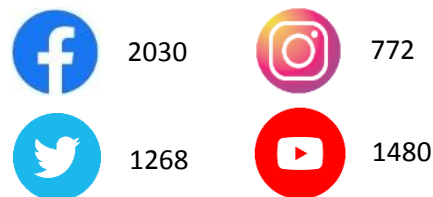
Spilt on how individuals are engaged



Traditional media produced



Followers on social media



Appendix 1. Focus Areas for Priorities



Sustainable agricultural and pastoral landscapes

1. Work with industry and farming groups to identify and address soil management issues to improve soil health and build resilience.
2. Encourage integrated management of prioritised pest plants and animals and early detection of alert species for improved biosecurity.
3. Promote and support the protection and enhancement of on-farm biodiversity and native vegetation as part of a productive system.
4. Promote and demonstrate best management practices to retain ground-cover and reduce erosion risk.
5. Support land managers to build resilience in farming systems through monitoring and managing climate risks and extreme events.



Sustainable water use

1. Work with the irrigation industry to optimise water use for productive, environmental and cultural outcomes.
2. Ensure sustainable water use by all water users in a changing climate.
3. Improve water literacy to develop the community's understanding of water management for productive, environmental and cultural outcomes.
4. Support water users to build resilience through monitoring and managing climate risks and extreme events.
5. Encourage integrated management of prioritised pest plants and animals and early detection of alert species for improved biosecurity.



Healthy rivers, lakes and wetlands

1. Manage and deliver environmental water to build the resilience of targeted wetland and floodplain ecosystems.
2. Actively manage watercourses for improved ecological outcomes in a changing climate.
3. Deliver initiatives that improve conditions for threatened species and culturally significant species.
4. Improve water literacy to develop the community's understanding of water management for productive, environmental and cultural outcomes.
5. Encourage integrated management of prioritised pest plants and animals and early detection of alert species.



Healthy landscapes

1. Work in partnership to manage total grazing pressure, including from over-abundant native species.
2. Work in partnership to proactively manage fire in the landscape to improve or maintain condition of key ecological and cultural assets.
3. Encourage targeted revegetation and restoration.
4. Ensure future seed availability of native species for revegetation in a changing climate.
5. Improve the level of protection for threatened and culturally significant species and ecological communities.
6. Encourage integrated management of prioritised pest plants and animals and early detection of alert species.



People at the heart of landscape management

1. Build and maintain strategic partnerships with, and between, stakeholders for mutually beneficial outcomes.
2. Work in partnership with First Nations to manage the region's landscapes, protect and restore cultural values and assets, and build capacity.
3. Partner with young people, foster their understanding, participation and leadership.
4. Strengthen capacity through increased knowledge, skills and participation.
5. Support community-led landscape management, providing resources to support community projects and practical action.
6. Recognise and encourage volunteers and volunteer community groups and support them to work safely and effectively.



Foundational programs

1. Develop the regional landscape plan and associated business plans.
2. Implement an effective monitoring, evaluation and reporting framework.
3. Ensure contractual obligations that come with external funding are delivered.
4. Continuously improve the information management systems that support evidence-based decision making.
5. Regular communication of landscape board business.
6. Accurate and timely financial, accounting and budgetary support services which are compliant with Australian Accounting Standards and government financial policies and procedures.
7. Effective and efficient administrative services providing support to staff, the landscape board, and its committees.
8. Maintain staff satisfaction through the management and delivery of human resources policy and programs

More information

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