

Business Plan Achievement Report

3rd Quarter 2021-2022

1 January to 31 March 2022

Eastern District






About

The Eyre Peninsula Landscape Board's [Business Plan for 2021-22](#) sets out the programs, and component sub-programs or work activities for 2021-2022, which are funded and delivered by the Board to achieve the goals and vision of the [2021-2026 Eyre Peninsula Regional Landscape Plan](#).

This *Business Plan Achievement Report* provides an update on delivery of all our Board-funded programs in the Eastern District during the last quarter. It includes reporting on the following for each sub-program:

- Program highlights;
- Local government engagement;
- Communications and community engagement undertaken; and
- Upcoming priorities for the next quarter.

Each sub-program is assigned a status, based on its current progress.

	On track to deliver key programs.		On track to deliver most programs. May be some delays.		Unlikely to deliver some program elements
---	-----------------------------------	---	--	---	---

For projects in the City Council of Whyalla and District Councils of Kimba, Franklin Harbour and Cleve areas, further details of our work and programs can be found on the [Eyre Peninsula Landscape Board website](#) or by contacting **Barb Murphy** (Acting Team Leader, Landscape Operations - Eastern District) on 0427 188 546.

Note: For updates about delivery, in the Eastern District, of Regional Projects such as the [Regenerative Agriculture Project \(RAP\)](#) and the [Saltmarsh Threat Abatement and Recovery \(STAR\) Project](#) refer to the *Business Plan Achievement Report: Whole of Region*.

Contents

Sustainable agriculture	1
Delivering district level sustainable agriculture services.....	1
National Landcare Program Smart Farm Mallee Seeps Project	1
Pest plants and animals, and impact-causing native species	4
Biodiversity	11
Protecting and restoring coastal habitats	11
Maintain and enhance biodiversity in prioritised ecosystems.....	11
Community	11
2021-2022 Grassroots Grants.....	12

Sustainable agriculture

Focus areas and priority programs	Status
<i>Reducing the risk of land degradation to protect the region's valuable soils</i>	
Delivering district level sustainable agriculture services , including: Monitoring and managing land management compliance	
Providing support to build awareness of the importance of erosion protection and improvement of land management practices	
Delivering the National Landcare Program (NLP) Smart Farm Mallee Seeps Project	

For updates on our [Regenerative Agriculture Project \(RAP\)](#) and Regional Agriculture Landcare Facilitator (RALF) services, please refer to the **Business Plan Achievement Report: Whole of Region**. More information about our sustainable agriculture program, as well as useful information and resources for land managers can be found [here](#).

Delivering district level sustainable agriculture services

Program highlights this period

- It is important for landholders who rely on water from dams or groundwater sources such as soaks, bores and wells, to regularly check their water quality for both salinity and pH. Landholders in the Eastern District can now bring their water samples to the Cleve office for free testing, as our Cleve office's salinity meter has recently been recalibrated and our new landscape officers have been trained to provide water quality testing services.
- Staff attended the South Australian Research and Development Institute (SARDI) Harvest Report Farmer Meetings in Rudall, Kimba, and Cowell. It was great to learn about current developments and catch up with landholders for a chat and get the latest information about local issues. Fox baits were also distributed by landscape officers to landholders at the Rudall meeting.

National Landcare Program Smart Farm Mallee Seeps Project

The Australian Government, through the National Landcare Program, have funded the [Overcoming the Rising Degradation of Mallee Seeps on Eastern Eyre Peninsula](#) project. Land managers are increasingly identifying Mallee seeps as a growing land degradation issue on the EP. Mallee seeps severely change pH and the chemical composition of soil, forcing areas of paddocks out of production. This project aims to increase farmers' awareness about Mallee seeps, and build capacity to detect and manage Mallee seep formation in their paddocks before land degradation occurs. The project will connect landholders to relevant scientific data and identify known management options that are best suited for the EP. Local trials and demonstrations will determine suitable practical treatments that can be applied by land managers in line with best practice sustainable agriculture to reduce the effects of saline seeps on the EP.

Program highlights this period

- Dr Chris McDonough's initial report on the project, ['Eyre Peninsula Mallee Seeps Sites Report Dec 2021'](#) was published and is now available on our website [here](#). The report describes the works completed under the project, presents data and an analysis of the results, and also outlines ongoing monitoring and activities that will be undertaken. The following information, diagram and photographs are drawn from the report:

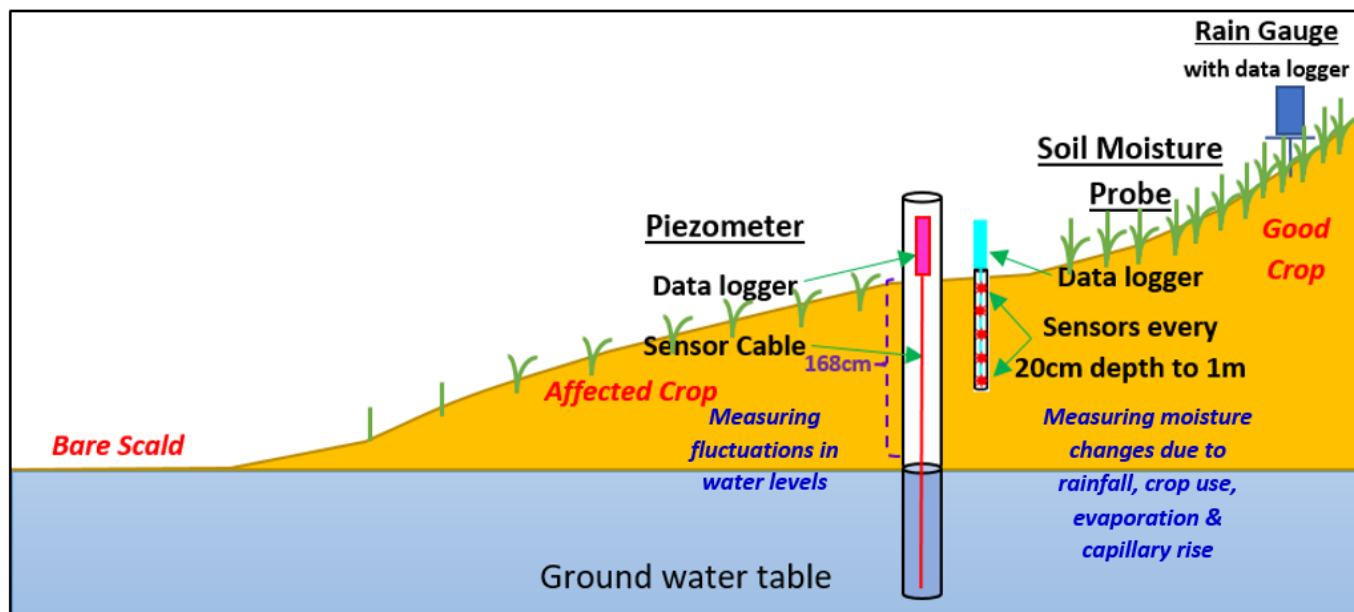


Figure 1: Monitoring Mallee seeps – typical piezometer, moisture probe and rain gauge setup at seep sites
(image credit: Chris McDonough)

- Under this project, six Mallee seep rehabilitation demonstration sites have been successfully established across key regions within the Eyre Peninsula, specifically at Kimba, Lock, Rudall, and Cowell.
 - The basic strategies used at all sites included using salt tolerant pastures and plantings of higher water use lucerne in targeted areas to intercept water flows. Each demonstration site is, however, quite unique in landscape soils and dynamics, stages of Mallee seep development, and farming systems, thus requiring unique ways of implementing these strategies. In some instances the basic strategies have also been complemented with other management elements, such as the installation of a water extraction sump. The diversity in the demonstration sites is greatly increasing our understanding of effective Mallee seep management on the Eyre Peninsula, and will enable us to make better site specific recommendations for managing these seeps.
 - All sites are already showing positive outcomes. It is, however, vital that each project is managed and monitored through coming years to gain the full benefits of the management strategies that are just entering the stages of lowering water tables and restoring degraded scalds.
 - A further report is planned at the conclusion of this project that will give more details of all monitoring outcomes, particularly in light of the exceptional summer rainfall events across the region. This rainfall is expected to trigger a significant increase in seep sites over the coming years.
- An online decision tree and video to assist landholders with decision making and remediation of Mallee seeps is close to completion and will be promoted to landholders in the next quarter.
 - The Eyre Peninsula Landscape Board would like to acknowledge and thank the co-operation and assistance provided for this project by demonstration site landowners Andrew Baldock and family, Shane Jericho and family, Michael Weiss and family, Kieran Glover and family, and Tim Franklin and family.

Communications and community engagement for this period

- The **Managing Mallee Seeps 'Turning Mallee Seeps Around'** workshop that was scheduled for 9 March at Rudall was postponed and will be held in the 4th quarter. This hands-on workshop with consultant Dr Chris McDonough from Insight Extensions Agriculture will be aimed at helping landholders identify Mallee seep affected land and return it back into profitable production, as well as provide advice on managing threatened areas after the big wet.

Upcoming priorities for the next period

- Continue to monitor demonstration sites and analyse results for final report.
- Complete online decision tree and video for promotion to landholders.
- **Managing Mallee Seeps 'Turning Mallee Seeps Around'** workshop for landholders.

*Photos are a key part of investigations. Before and after pictures (see right) give a clear visual reference to farmers of the changes resulting from seasonal factors and strategic management approaches. Photos taken at **Kimba, Jericho Farm Seep 3b***

*Photo 1: **Before**
Scald area rapidly spreading though cropping land*



*Photo 2: **After**
Seep covered with Puccinellia sp. and surrounded by lucerne, December 2021*



*(image credits
Chris McDonough)*

Pest plants and animals, and impact-causing native species

Focus areas and priority programs	Status
<i>Supporting landowners to control prioritised pest plants and animals</i>	
Implementing regional pest management plans for priority pest plants and animals	
Supporting landowners with their pest control responsibilities, including weed identification, best practice control advice and property planning assistance	
Delivering targeted pest animal baiting programs and weed control campaigns, monitoring, permitting and compliance works	
<i>Collaborating to reduce threats from impact-causing native species</i>	
Assisting landowners to connect with relevant authorities and providing information about impact-causing native species and control options	
Cataloguing current and emerging impact-causing native species, their impacts and extent	
Collaborating to reduce threats from impact-causing native species	

*For updates about pest plant and animal, and impact-causing native species control activities implemented in the Eastern District as part of the [Saltmarsh Threat Abatement and Recovery \(STAR\) Project](#) refer to the **Business Plan Achievement Report: Whole of Region**. Updates on development of our regional pest and impact-causing natives management plans can be found in the same report.*

Program highlights this period

Pest plants

Training

- All Eastern District staff completed accredited Work Zone Traffic Management training for safe work on roadsides. Training covered safe work on roadsides, applying for permits to work on state roads, implementing traffic management plans, and using road safety signs. Working on roadsides is deemed high-risk work therefore training is mandatory for all Board staff and contractors working on or alongside roads or road related areas.
- Our two new landscape officers commenced Authorised Officer (AO) training. AOs are individuals, trained and assessed by the Department for Environment and Water (DEW), who are appointed as State Government officials under the [Landscape South Australia Act 2019](#). An AO is able to carry out compliance work on behalf of the Eyre Peninsula Landscape Board.

Pest plant contractors

- Staff have been working on developing a register of pest plant contractors who can be engaged to assist with declared weed control on roadsides following unprecedented rainfall in the district. Contractor safety is a priority and a current Pest Technician's licence and Work Zone Traffic Management ticket are a requirement for all pest plant contractors who undertake work on behalf of the Board. Contractors must also sign a Contractor Safety Plan. Anyone interested in tendering for weed control work are encouraged to contact us.

Summer Grasses ([Buffel Grass](#), [Fountain Grass](#), [African Lovegrass](#))

- During a five day operation, survey and spot spray work to control summer grasses was undertaken on Lincoln Highway from the Port Augusta Tanks to Whyalla, along Port Bonython Road, and around Whyalla including at Hummock Hill.

- Higher than average rainfall over the summer months has resulted in Buffel Grass popping up in new areas as well as the growth of larger than usual infestations at known control sites. About 6,250 Buffel Grass plants were treated during the five day operation.

Gazania

- Spraying of isolated [Gazania](#) patches on roadsides between Cleve and Arno Bay is ongoing. The aim of works are to control these manageable areas initially, followed by developing weed control fronts around the townships with the intention to prevent further spread. Other focus areas for control include Kielpa and the Cleve to Kimba highway.

African Boxthorn

- Landscape officers carried out [African Boxthorn](#) control using cut and swab herbicide application along Five-Cross Road near Arno Bay. This work was a follow-up to spray work previously carried out in accordance with the *Eastern District African Boxthorn Management Action Plan*. Boxthorn infestations impacting native vegetation were targeted in order to free up Mallee stems and allow for understory regeneration. Ongoing work will be done in this area to halt the spread of Boxthorn to the west.
- Boxthorn infestations are widespread along the Lincoln Highway. While density is sparse in the north, at the "Iron Duke" mine turn off, located approximately half way between Whyalla and Cowell, but there are heavy infestations further south towards Arno Bay. Boxthorn control work along the highway has therefore been planned, with control works to extend from the "Iron Duke" mine turn off to as far south as the Wharminda Boundary Road junction. A contractor has been engaged to commence these Boxthorn control works, starting at the "Iron Duke" mine turn off, and working south. A mix of control methods, cut and swab and granular herbicide application, will be used. Not all planned works will be completed under this initial contract, but works will be ongoing, with further contracts executed to complete them.



Photo 3: Landscape officer spraying Buffel Grass and Fountain Grass on Hummock Hill in Whyalla, as part of a five day blitz in the area



Photo 4: Higher than average summer rainfall has resulted in more than usual Buffel Grass popping up around Whyalla and on our highways in the Eastern District. Spray vehicles deployed to control these summer grasses in a five day blitz

Opuntia Ficus indica (Indian Fig)

- Follow-up visits to observe the progress of cochineal bio-controls on the [Opuntia](#) cactus (species *Ficus indica*) along the Birdseye Highway were conducted recently. Cactus pads infected with cochineal insects that were harvested from previously established bio-control nursery sites were deployed on healthy cactus on the Cleve to Cowell roadside late last year. It was good to see the cochineal have spread quickly to several pads surrounding the area where the infected pad was deployed. The rate of spread observed for this biocontrol in such a short time is very promising for controlling Indian Fig cactus in the district. Cochineal are dormant over the cooler months so spreading will begin to slow from now until spring.



Photo 5: Fluffy white evidence of the cochineal insects spreading on prickly pear cactus along the Birdseye Highway between Cleve and Cowell

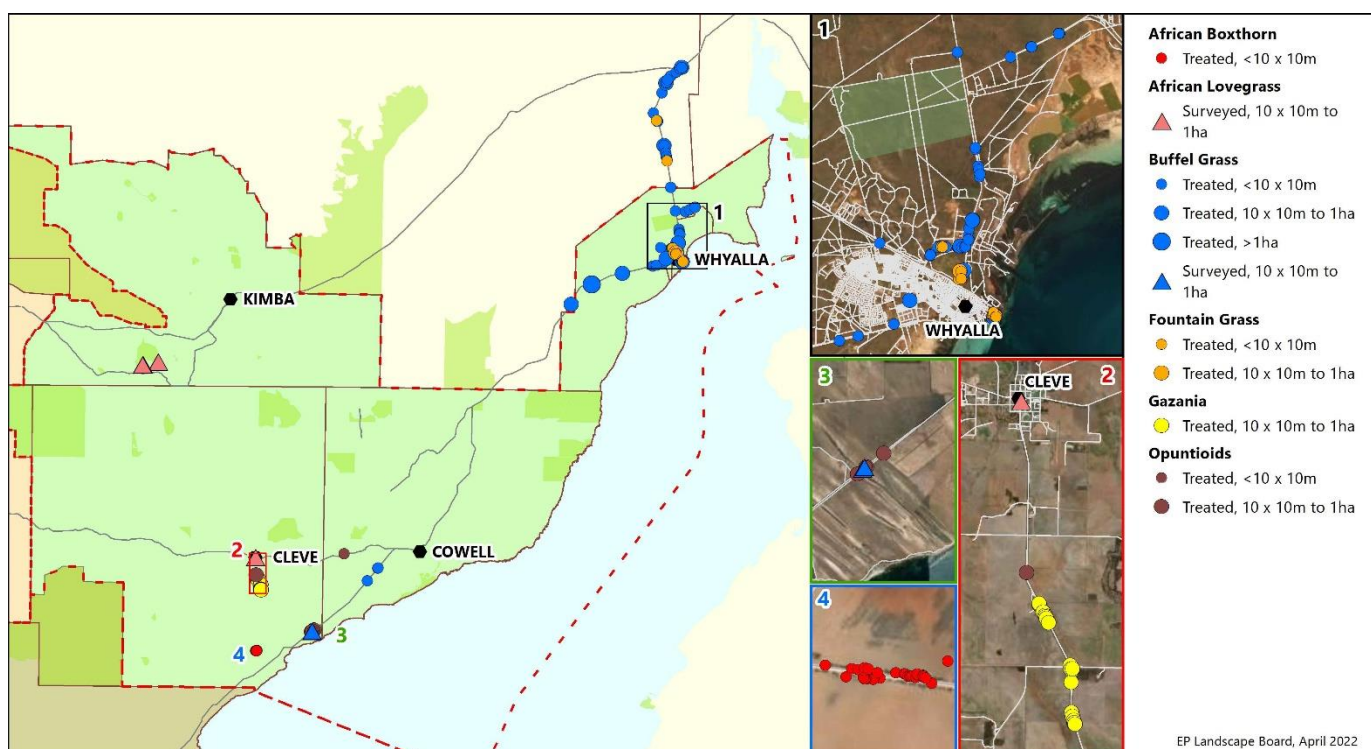


Figure 2: Priority pest plant control for the period 1 January to 31 March 2022

Pest animals

Rabbits

- Interest in rabbit control programs continues to rise with reports of numbers in the area increasing. Landholders in the Arno Bay area have begun baiting as part of an integrated plan to get on top of the already established infestations. The Rabbit Haemorrhagic Disease Virus (RHDV1) K5 strain that was released last year should still naturally be circulating, and this paired with a strategic baiting program should ensure that rabbits in all stages of the lifecycle are targeted and controlled.
- Cross-district collaboration: Landscape officers from the Eastern District joined forces with the Southern District team for a group rabbit bait production day. This was efficient for mixing a large quantity of 1080 poison oats, which are now available for sale to landholders in both districts. Landholders wanting to purchase buckets of 1080 poison oats or loan bait layers please contact Cleve landscape officers (contact information on the back of this report).
- Bait layers were loaned to three landholders to assist them with their rabbit baiting, and 80 kg of 1080 poison oats was sold to landholders during the quarter.



Photo 6: Eastern and Southern District teams unite for rabbit bait production



Photo 7: Landscape officer discusses pest pressures and control options with a landholder at the Wharminda fox bait distribution day

Foxes

- Over a two week period from late February to mid-March, landscape officers visited 10 sites across the district to distribute 1080 fox baits to landholders. Locations included Waddikee, Coolanie/Glynn, Kelly, Rudall, Darke Peak, Mangalo, Elbow Hill, Wharminda, Arno Bay and Buckleboo. Fox bait distribution assists landholders coordinate baiting programs prior to the districts peak lambing season. Over 4,000 baits were distributed through the distribution days with an additional 560 baits collected from the Cleve office.
- Landholders are also encouraged to bait again in spring for best practice fox control.
- 1080 fox baits are available from the Cleve office by appointment year round.



Photo 8: Buckleboo Deer Eradication Project: Cameras are now established at 32 dam sites broadly spanning the Buckleboo area to monitor feral deer. So far Red Deer have been detected at five sites but this appears to be a single population of one or two herds groups inhabiting the same area.



Photo 9: Three female deer (does), captured on motion sensing camera, drinking at one of the dam monitoring sites. Red Deer are social animals and live in herds dominated by a single female. Breeding is mainly in April, and females give birth after an 8-9 month gestation period.



Photo 10: Deer like to wallow in water bodies like dams, when they do they slough off DNA which is persistent in the environment and can be detected in water with an eDNA water test.

Feral Deer (Buckleboo Deer Eradication Project)

The Buckleboo Deer Eradication Project aims to eradicate a feral deer satellite population from 8,500 ha around mixed farming properties at Buckleboo. The project commenced in late 2021 and will run through to 2023. The project is part of a multi-agency program with funding from the EP Landscape Board, the Limestone Coast Landscape Board through their SA Government Landscape Priority Fund project "[Stopping the Spread of Feral Deer](#)", the Centre for Invasive Species Solutions (CISS) Deer Control National Program fund, Primary Industries and Regions South Australia (PIRSA), and in-kind contributions from National Parks and Wildlife Services (NPWS) and SA Arid Lands Landscape Board.

- A formalised monitoring program to establish feral deer presence and range has been established for the Buckleboo Deer Eradication Project. Ecologist Peri Stenhouse has been engaged to set up camera traps and take eDNA water samples at dam sites in the Buckleboo area. Sixty-four remote sensing (motion detection) cameras have been set up at 32 dam sites. A total of 21,953 images were collected in the first fortnight, with Red Deer (*Cervus elaphus*) recorded at five of the sites.
- Ongoing monitoring will be carried out at the 32 dam sites with fortnightly camera checks. Camera data will inform an aerial deer shooting operation with Helifarm contractors in June, and camera monitoring and fortnightly camera checks will continue after the June shoot.

- When animals move through the environment they shed cells, mucus and faeces into their surroundings, leaving DNA as they go. This DNA is known as environmental DNA or eDNA. If we take samples of soil, water and even air, and then test for this eDNA, we can then determine which animals have recently been present in that environment.
- eDNA, samples are being collected monthly and sent to Canberra University for analysis and will be used in conjunction with camera data to calibrate presence/absence of deer in the area. In the later stages of the project eDNA data will also be used as proof of freedom (absence of deer) for demonstrating successful eradication of deer from the area.
- The use of eDNA for pest animal monitoring is new and so far has only been used for a feral pig eradication project on Kangaroo Island. Therefore this project will also play an important role in the development eDNA as a feral animal, and specifically a feral deer monitoring tool. The data will contribute to a publication by Primary Industries and Regions South Australia (PIRSA) and Canberra University.
- We strongly encourage anyone to report sightings of deer to any of our offices, and/or on [DeerScan](#). This is especially important if you are seeing deer moving into areas where you don't usually see them.

Local government engagement for this period

- Support was provided to the Whyalla City Council for their voluntary compliance control of Buffel Grass and Fountain Grass on Hummock Hill. Whyalla City Council supported the Hummock Hill road closure when spray work was carried out.



Photo 11: A male deer (buck) with impressive velvet covered antlers. Red Deer are capable of producing 10-15 kg of velvet annually. Red Deer bucks can exhibit very large antlers with multiple tines that are cast in October/November and regrow by February. Males are only territorial during the April mating season. Red Deer are large animals, with males up to 120 cm, 135-220kg.



Photo 12:
Tweet about fox bait distribution days

Communications and community engagement for this period

- Various media was published about the fox bait distribution days, including [Facebook](#) and [Twitter](#) posts, a [media release](#), an article in [Stock Journal](#), and interview on 5cc radio and with EP Advocate).

Upcoming priorities for the next period

- Mapping of declared weeds with the Whyalla City Council spray crew is ongoing.
- Kimba Roadhouse Khaki Weed priority control work and follow-up on an ongoing voluntary compliance control plan with a landholder.
- Boxthorn control work along the Lincoln Highway from Iron Duke Mine to Arno Bay is to be carried out by a contractor.
- Survey and control of summer grasses (Buffel Grass, Fountain Grass, African Lovegrass), and Silver-leaf Nightshade will be ongoing. This will include work on all Department for Infrastructure and Transport (DIT) roadsides in the Eastern District; Lincoln Highway, Eyre Highway, Birdseye Highway, the Cowell to Kimba Road and the Cleve to Kimba Road.
- Development of Eastern District Annual Action Plans for the management of priority pest animals and plants will be ongoing.
- A PIRSA Pest Vertebrate and Unpalatable Grasses Workshop for Landholders, supported by the EP Landscape Board, has been scheduled for mid-June.
- A feral deer workshop for landholders, presented by PIRSA and supported by the EP Landscape Board, is scheduled for mid-June. It will be hosted by the Baldock family at their Karinya property in the Buckleboo area.
- Rodent Blaster training and induction for landscape officers is scheduled for mid-June. Once accredited, staff will be able to utilise two warren imploding units purchased by the Board to assist landholders with rabbit control programs across the region.

Biodiversity

Focus areas and priority programs	Status
<i>Protecting and restoring prioritised coastal habitats</i>	
Supporting community to undertake coastal management works in line with the Coastal Action Plan	
<i>Maintain and enhance biodiversity in prioritised ecosystems</i>	
Supporting community and landholders to improve the health and condition of threatened ecological communities, native vegetation and threatened species	
Implementation of the biodiversity monitoring program	
Collaboration with partners to source funding for landscape-scale projects in priority ecosystems. Specific projects underway include:	
Enhancing Remnant Vegetation (ERV) Pilot	

For updates about delivery of our landscape-scale and region-wide biodiversity projects and programs, including activities in the Eastern District, refer to the **Business Plan Achievement Report: Whole of Region**. This report includes information on:

- the [Saltmarsh Threat Abatement and Recovery \(STAR\) Project](#);
- Blue Carbon
- the Enhancing Remnant Vegetation (ERV) pilot;
- Eyes on Eyre;
- the Biodiversity Monitoring Program; and others.

Protecting and restoring coastal habitats

Upcoming priorities for the next period

- Delivery of the Eight-Mile Creek and Murripi Beach way-finding signage, beach access, and saltmarsh vegetation protection and interpretive signs projects has been carried over to 2022-23 financial year to allow more time to deliver on ground works.

Maintain and enhance biodiversity in prioritised ecosystems

Program highlights this period

- Plant samples from the Bushland Condition Monitoring completed during the first quarter were sent to the herbarium for identification. These have now been identified and datasheets finalised. The next stage is data entry and producing reports for landholders.

Upcoming priorities for the next period

- Bushland Condition Monitoring data entry will be completed and reports prepared and provided to landholders.

Community

Focus areas and priority programs	Status
<i>Community at the centre and actively engaged in landscape management</i>	
Supporting Aboriginal and community groups, Local Government, farming groups and schools to progress natural resource activities through the provision of the Grassroots Grants program	

This section provides information about the delivery and acquittal of Grassroots Grants in the Eastern District, and support provided by Board staff to grant applicants. For updates about the [Grassroots Grants](#) application process, successful applicants the award of Grants, and overall management of the Grassroots Grants program, refer to the **Grassroots Grants program** section in the **Business Plan Achievement Report: Whole of Region**.

2021-2022 Grassroots Grants

Three projects funded through the Board's 2021-2022 Grassroots Grants program are being delivered in the Western District (Table 1).

Table 1: EP Landscape Board Grassroots Grants - 2021-22 successful applicants in the Western District

	Project Title	Organisation
1	Protecting our soils through improved grazing management	WoTL Ltd
2	Point Lowly and Santos Escape Road - Irrigation and vegetation protection projects	Whyalla City Council
3	Restoring Eyre Peninsula (EP) Blue Gum woodlands and managing saline soils.	MR & AC Hannemann

Landscape staff provide ongoing support for the delivery of these projects. Some of the work completed on these projects during the last quarter include:

Restoring Eyre Peninsula (EP) Blue Gum woodlands and managing saline soil

This project aims to aid recovery of 300 EP Blue Gums planted as part of ongoing works to re-establish EP Blue Gum woodlands. Under this project a variety of EP Blue Gum community natives, including salt tolerant species will be planted to enhance biodiversity and combat salinity in the woodland.

Program highlights this period

- Seed for revegetation work has been sourced and direct seeding is planned for April.
- Tube stock has been ordered and a community planting day is planned for next quarter.

Upcoming priorities for the next period

- Direct seeding and tube stock planting.

Point Lowly and Santos Escape Road – Irrigation and vegetation protection projects

The aim of this Whyalla City Council project is to improve the amenity and native vegetation at Point Lowly Campground, through provision of drip irrigation to tree plantings, installation of fencing to protect native vegetation, signage and ripping of informal tracks.

Program highlights this period

- The irrigation component of the project was completed this quarter.
- Cypress posts for vegetation barriers have been delivered and fencing work has commenced.

Local government engagement for this period

- Proofs for coastal revegetation signage will be developed for the joint project.
- Ongoing liaison and support will be provided to the Council.

Upcoming priorities for the next period

- Installation of fencing to protect native vegetation, signage and ripping of informal tracks.

Published by the Eyre Peninsula Landscape Board.
28 April 2022

T: Port Lincoln 08 8688 3200

T: Whyalla 0488 000 481 or 0427 188 546
Severe Weather Recovery Coordinator: Tim Breuer
Acting Team Leader Landscape Operations - Eastern: Barbara Murphy

T: Cleve 0428 282 077 or 0409 611 547
Landscape Officer: Liam Anderson
Landscape Officer: Cindy Hannemann

E: EPLBAdmin@sa.gov.au

Report prepared by:
Eyre Peninsula Landscape Board

www.landscape.sa.gov.au/ep/home



With the exception of the Piping Shrike emblem, other material or devices protected by Aboriginal rights or a trademark, and subject to review by the Government of South Australia at all times, the content of this document is licensed under the Creative Commons Attribution 4.0 Licence. All other rights are reserved.