

Protecting Ramsar wetlands, coastal environments and improving soil health

RGD14-C203



July 2015

Acknowledgements

This project is supported by South Natural Resource Management Inc, through funding from the Australian Government.

The delivery of this report was possible with the support of the following organisation and their considerable contributions; participating landholders, community volunteers, Esperance Regional Forum (ERF) members and committee, Esperance Bird Observer Group, Esperance Weed Action Group, Department of Agriculture WA, Department of Parks and Wildlife, Department of Water, Shire of Esperance, Lake Warden and Lake Gore Technical Advisory Group, Stokes Inlet Management Group, Wongutha Christian Aboriginal School and Esperance Farmllet Services.

This report was compiled and all images taken by Claudia Magaña, South Coast NRM.

Cover Photo: Claudia Magaña

Contact details

For information regarding this report, contact:

Project Manager Kylie Bishop or Project Officer Claudia Magaña

South Coast Natural Resource Management Inc.

39 Mercer Road, Albany WA 6330

Telephone: (08) 9076 2206

Facsimile: (08) 9072 0499

Email: kylieb@southcoastnrm.com.au or claudiam@southcoastnrm.com.au

Table of Contents

Acknowledgements.....	1
Contact details	1
Introduction	6
Summary of Achievements	6
Evaluation Questions	9
Impact	9
Effectiveness	9
Appropriateness (Methodology)	10
Efficiency	11
Legacy.....	11
Project Learnings.....	11
Future Recommendations	12
Appendix	13
1.0 Media – Newspaper	13
1.1 Student Acknowledged - Esperance Express (22/01/2014).....	14
1.2 Wetland Conservation for the Birds - Esperance Express (02/04/2014)	15
1.3 Direct seeding workshop advertisement - Esperance Express (March 2014)	15
2.0 Media – Posters/Flyers	16
2.1 Lake Gore catchment Map (October 2013)	16
2.2 Lake Warden catchment Map (October 2013)	17
2.3 Stokes Inlet catchment Map (October 2013).....	18
2.4 Lake Warden Story 1 (October 2013)	19
2.5 Lake Warden Story 2 (October 2013)	20
.....	20
2.6 Lake Warden Story 3 (October 2013)	20
2.7 Lake Warden Story 4 (October 2013)	21
2.8 Lake Gore Story 1 (October 2013)	21
2.9 Lake Gore Story 2 (October 2013)	22
3.0 Direct seeding workshop Esperance flyer (March 2014)	22
3.1 Direct seeding poster (October 2014)	23
3.2 Migratory shorebird flyer (April 2015).....	24
4.0 Media – electronic news (Facebook)	25

4.1 Castletown quays beach weed activity (21/04/2014)	25
4.2 Shorebird workshop FB post (17/04/2015)	26
5.0 Media – electronic news (Newsletters)	27
5.1 WA South Coast Shorebird network Newsletter Vol.10	27
6.0 Media – Map	28
6.1 Map of Watsonia Lake Warden	28
6.2 Map of Blackberry Bandy Creek.....	28
7.0 Media – Photo monitoring.....	29
7.1 Monitoring Weed Watsonia FP1.....	29
7.2 Monitoring Weed Watsonia FP2.....	31



Image facing east

Photo Point: FP2-2 after treatment Gibson Road

<p>Photo point location: Gibson Road 50m from railway line Catchplan Ref: FP2-2</p>	<p>Date: 6 Dec 2013</p>	<p>Time: 15:47 pm</p>
<p>Location details: Small patch of Watsonia found 100m from railway intersection on Gibson road.</p>	<p>Compass bearing/Direction of photo (left to right of image): East</p>	<p>GPS: Lat: -33.750022 Y_proj: Long:121.866103 X_proj:</p>
<p>Lens type/other camera settings: Apple ipad 1/458 sec, F/2.4, Focal length 4 mm, ISO-50</p>	<p>Photographers name: Kylie Bishop</p>	
<p>Purpose of photo/site observations: To document the location of the weed and to confirm that the treatment has worked by following up with a post treatment photo. To monitor over time whether further treatment will be required.</p>		



Image facing east

Introduction

The project 'Protecting coastal environments and improving soil health project' focused on three important project areas. Improving ground cover in the Young River and Lort River catchments as part of a Southern Soils component. Protecting coastal environments, urban waterways, ecological communities and EPBC species as part of the coastal environments and urban waterways component. Protecting the Ramsar values of the Lake Warden and Lake Gore catchments as part of the Ramsar Wetlands component.

The Southern Soils component has improved ground cover management in the Young and Lort River catchment areas. By facilitating sustainable practices to prevent wind erosion and productivity losses on farms through strategic fencing to protect 378 ha of soil and soil stabilisation planting to protect 12 ha of soil. Associated workshops, field days, forums and communication activities have engaged farming communities in innovative practices to increase skills and knowledge and adopt new behaviours. This project aims to protect the health of the Stokes Catchment estuary.

The coastal environments and urban waterways component of the project has supported community and partners to protect coastal environments, urban waterways, ecological communities and EPBC species across coastal environments of the South Coast NRM Region. The project was delivered over 2 years and priority sites identified by the community and partner organisations under the guidance of the Regional NRM Strategy Southern Prospects and the Regional Coastal Strategy Southern Shores and local area management plans. Coastal project locations include coastal Environments around Esperance, Local Government Coastal Reserves and Nature Reserves and National Parks managed by the Department of Parks and Wildlife (DPaW) are significant coastal assets to the Region.

Coastal community groups including Indigenous, land managers, schools and coastal users have engaged in on-ground coastal and waterway protection, education and capacity building activities. The project has directly involve coastal communities in partnerships with managers to protect and enhance healthy coasts in the South Coast NRM Region in a changing climate.

Activities included coastal environment protection and rehabilitation works around Esperance and Stokes Inlet with South Coast NRM in partnership with Esperance Regional Forum (ERF); including Indigenous engagement and participation in education, skills and knowledge activities relating to coastal environments across the South Coast Region.

As part of protecting Ramsar values through rehabilitation works for Lake Warden and Lake Gore this project has worked with the Esperance community and project partners to deliver targeted rehabilitation works in priority areas within the Lake Warden and Lake Gore catchments. To restore ecological character and abate threats to Ramsar values as identified in Lake Warden and Gore Ecological Character Description (ECD) reports and by the Lake Warden and Gore Technical Advisory Group (TAG).

Summary of Achievements

Southern Soils component completed the following;

- 1 Project Plan
Engaged with 6 farming entities to complete fencing and engaged 6 farming entities to complete revegetation projects to protect soil from wind erosion;
- 12.2 km of fencing to protect 378 ha from wind erosion and stock grazing
- 12 ha of revegetation projects to rehabilitate natural water ways to stabilise soil erosion and sedimentation movement
- 1 knowledge and skill event; involving a presentation at the Cascade Field day on the latest revegetation techniques that combine direct seeding and tube stock plantings delivered to 20 farm entities and 30 land managers
- 4 media products; 1 media (newspaper article) on the River Health activities linking to sustainable land management practices, the Cascade field day presentation, direct seeding poster and native species information sheets
- 1 fully attributed GIS data set for this project

Coastal Environments and Urban Waterways component completed the following;

- 10 km of fencing that protects 69.4 ha of remnant bushland from stock grazing
- 10 ha of revegetation to rehabilitate water ways and wetlands to stabilise soil erosion and sedimentation movement into coastal environments
- 2 field day activities by delivering 2 River Health educational activities to a total of 45 local students. Activities were held at the Lort River (Stokes Inlet Catchment). Linking coastal environments and urban water way management themes by assessing the health of the rivers through water quality field testing techniques.

Protecting Ramsar values through rehabilitation works for Lake Warden and Lake Gore component completed the following;

- 22.2 ha of bio-diverse planting to restore habitats for significant flora, fauna, mitigate altered hydrology and salt loads across 21 sites and across 47 project participants
- 11.47 ha of weed management in particular achieving 80% eradication success rates for Watsonia, Blackberry and Victorian Tea Tree
- 18 km of fencing to protect 213 ha of remnant bushland and rehabilitated areas across 8 landholdings
- 2 shorebird surveys covering over 300 ha

- 4 indigenous participation activities in pre and post revegetation, rehabilitation site assessments and fencing activities. A total of 32 land care students participated from Wongutha Caps School
- 2 workshops; a direct seeding revegetation techniques workshop and a migratory shorebird identification workshop activities involving 22 participants
- 2 coastal activities; 2 at Castletown Quays weeding activities in partnership with Esperance Weeds Action Group involving 15 participants
- 5 field day activities; 4 at Lake Monjimup and 1 at Woody Lake raising awareness of the importance of Ramsar wetlands and the habitat values they provide through water quality, macro invertebrate sampling, wetland bird life and water way health check activities involving 35 student participants
- 6 communication activities; 2 Esperance Agricultural Show displays where 20 participants were engaged in restoring vegetation activities. The Esperance Agricultural Show also provided the opportunity to show case the project to a minimum of 80 community members. Assisted the delivery of 4 communication activates on the Ramsar Wetlands on water quality to 120 participants and carried out demonstrations on soil identification.
- 2 coastal media products; 1 Migratory shorebird flyer and compiled soil identification information sheets
- Supported coastal groups through 11 meetings; with the Stokes Inlet and RAMSAR technical groups, Esperance Regional Forum and Esperance Weeds Action Group to guide coastal, Ramsar wetland and Stokes Inlet Catchment on ground works.

Evaluation Questions

Impact

This project has had an impact across the Stokes Inlet Catchment, the Lake Gore Catchments and the Lake Warden catchments by increased the area of native vegetation in the catchments by 44.2 ha and protected 660.4 ha of vegetation through 40.2 km of fencing and engaged over 445 project participants. Significant weed eradication has been the reduction of Watsonia by 80%.

Effectiveness

Overall the project delivered what was intended as listed in the summary of achievements. Some initiatives didn't start off as effectively for example the indigenous participation activities. While the most effective outcomes were from the Bird (Fauna) surveys, revegetation activities and weed control activities.

Not all of the indigenous participation activities were delivered. An additional indigenous participation activity has been varied to the first stage of the NLP project. Advice on indigenous participation activities was sought from traditional owners and the local Christian Aboriginal Parent-directed School, Wongatha CAPS. The one indigenous participation activity held was highly effective and engaged 10 students from the school in site assessment and property planning activities. This included examining the landscape scale context and the linkage to the broader landscape values. The property plan activities will be implemented by the school over the next 12 months. We are in the process of establishing a second participation project to look at the habitat values of revegetation through remote sensors. In particular, this project will be seeking to establish if Quendas have returned to the area. An additional engagement opportunity had been developed to engage with school students around the cultural values of an area. However, due to significant fire damage to the area will need to be redesigned.

Bird surveys have been highly effective and covered a large area, surrounding both the Lake Warden and Lake Gore Ramsar wetlands. The surveys have been effective and value for money. They have also provided a great way of linking with community groups and utilising the expertise that exists within our local community. Volunteers from the Esperance Bird Observers Group have been instrumental in delivering surveys.

Revegetation activities were highly successful, with the project overachieving 22.2 hectares were delivered across 19 sites in the Lake Warden and Lake Gore catchments and 22.2 in the Stokes Inlet Catchment. Land managers were typically interested in revegetation programs to return native vegetation to the landscape in low productivity agricultural areas of their property.

Weed activities have been successful, but will require follow up treatment. Foliar spraying of Watsonia infestations close to the Lake Warden wetlands has reduced the known area of infestation by 80%, but further works will be required to achieve a 100% success (refer to appendix 6 and 7 for map of treatment area).

Appropriateness (Methodology)

The project approach and strategies were appropriate in engaging and influencing targeted stakeholders and therefore achieving the intended outcomes as listed in the summary of achievements. Through consultation with both the Stokes Inlet Management Group and the Lake Warden Technical Advisory Group to advise on the methodologies which included; photo point monitoring, surveys, maintaining a communication log and regular updates/reports.

The photo points monitoring includes photographs (jpeg file), spatial information (GPS points) and meta data with on fencing, revegetation and weed control. For both fencing and revegetation the selected sites will continue to be monitored as it will take several years post this project to yield useful results. The revegetation program was guided by the following resources 'Revegetation Guidelines – Action Timeline and Checklist'; 'Guidelines for maximising biodiversity benefits of revegetation and 'Improving the direct sowing of native plants in agricultural lands of Southern Australia' by Dr Geoff Woodall. Weed control photo point monitoring have shown results within the life of the project (Refer to Appendix 7). Long term monitoring is possible and continues for key sites. Data collected from projects completed in the last 3 years are used in media products that show case the benefits of natural resource management.

The Direct Seeding post workshop survey indicated that participants are interested in being connected with further resources either through the internet or through more practical avenues. Although only some attendees had improve knowledge and skills while most indicated no change. This will be an area of improvement for future workshops. The Migratory Bird post workshop survey indicated that attendees were interested in learning more about the Shorebird 2020 program, about food sources for birds in our area and resources on bird IDs. This will be another area of improvement for future workshop. Most participants indicated an improvement in fauna knowledge and skills.

The communication log has been improved by creating an access database which allows the project officer to follow the communication of a particular land manager across projects overtime time. This record enables the user a way to keep track of project interests for current and future projects.

The written updates and final reports on fencing works collects information on how the land managers have managed the project and feeds back into the planning for future projects.

The bird survey methodology utilised in this project is consistent with the Shorebird 2020 process. This means that the data collected is a standard methodology and ensure that the results will be comparable over the years and over difference geographical scales in the region, state and nationally. The methodology employed also allows a broader understanding of bird movements within the wetlands adjacent to the Ramsar sites and therefore allows a more detailed analysis of the ecological character.

Efficiency

Revegetation activities delivered through this project were highly effective. The use of both direct seeding and tube stock allowed the project to achieve more hectares than was contracted. This activity has proved good value for money and the survival rates have been above average (75%). Bird surveys have proved to be an efficient delivery mechanism for collecting large amounts of data about birds across (300km coastline and 60km inland) of the Esperance region. Collaborating with a volunteer group (Esperance Bird Observers Group) has been an effective method and allowed large areas to be covered concurrently.

Weed control activities have been effective and efficient, with 80% reduction in the areas of *Watsonia* close the Lake Warden Wetlands. To ensure the control activities are efficient will require on going monitoring and further control if required.

Legacy

The land managers who took part in this project are contractually bound to maintain sites for 10 years following the project completion. The project outcomes will be maintained through the up skilling of community groups to increase capacity and participation required for sustainable management of projects.

Further funding will be required to continue long term monitoring, to provide technical support and capacity building for Esperance Regional Forum (ERF) and partners. To continue operations of ERF, partners and members of the Lake Warden and Lake Gore Technical Advisory Group and the Stokes Inlet Management Group. ERF and technical group partners provide valuable input to identify opportunities for funding that are in line with catchment priorities.

Project Learnings

Weather conditions did have an impact on project delivery. Lower than anticipated seasonal rainfall meant that crop seeding was protracted. This meant that landholders were not ready to plant native revegetation until later in the season than normal. Indigenous participation opportunities did not happen as they were planned. Only one of the two activities was delivered as planned. This is due to inexperience of the project officer in engaging with the local Traditional Owners and low awareness of the projects of interest. In the past there has been Indigenous support for this role. To improve in this area further training with an indigenous member of the community might be required allowing introductions to the indigenous community and building networks with the indigenous community.

A challenge for the project was been the implementation of community capacity building activities. They often take more time to implement than initially anticipated. At times it was difficult to balance the need to deliver these activities with delivering on ground works. During the delivery of this project it was identified that the process of entering into agreements with landholders to carry out on ground works was required. Through internal consultation this process was streamlined. The improved process will be implemented in future projects. Another lesson learned was the importance of implementing behaviour change principles. Communication activities and field days need to be

designed from a ground-up perspective rather than top-down to have maximum impact. This requires time to ask people what they want, which can be achieved through surveys, or through one on one consultation. This approach helps to provide a greater understanding on how to deliver the project more effectively. As a result of behaviour change training, a communications group has been established to provide input and guidance on communication activities. The different perspectives have been useful in shaping activities for the National Landcare Program Ramsar Project activities.

Future Recommendations

Actions to build on this project are:

- To continue a strategic on-ground works approach that addresses key treats to urban water ways, coastal environments of Lake Warden and Lake Gore Catchments
- To continue a strategic on-ground works approach that addresses key threats to soil through nutrient loss, wind and water erosion in the Stokes Inlet Catchments.
- To continue education and behaviour change activities to promote sustainable land practices to protect the ecological character of Lake Warden and Lake Gore (Ramsar wetlands) and maintaining ground cover levels above regional ground cover targets for the Stokes Inlet Catchment.
- To continue to work with land managers to improved agricultural practices; maintain positive behaviours by those already implementing sustainable land management practices maintain project outcomes and provide advice on new NRM methods as they arise.
- To engage new land managers who have not yet taken up on-ground works in strategic locations.
- To continue fencing incentives and increase incentive rate per kilometre to assist fencing to be more widely adopted.
- To engage land managers in improve native revegetation methods by way of combined direct seeding and planting of tube stock.

Appendix

1.0 Media – Newspaper

NEWS

Science stars of the future

SIXTY labs in 12 days was the aim of the National Youth Science Forum, held at the University of Western Australia from January 6-18.

The NYSF helps students moving into year 12, who wish to follow careers in science, engineering and technology by introducing them to research and researchers, by encouraging the achievement of excellence in all their undertakings, and by helping to develop their communication and interpersonal skills.

Esperance Senior High School student Alicia Jackson was the first student chosen from the school in six years to attend the forum.

She visited UWA's Clinical Training and Evaluation Centre (CTEC) to learn about aspects of medicine including laparoscopy and suturing.

CTEC has become the most established medical simulation training centre in the Asia Pacific region since its inception in 2000.

It has trained more than 25,000 medical professionals in some 2000 training courses.

Alicia said she hopes to become

more familiar with the centre after finishing year 12.

As well as visiting UWA, the 144 students – 10 from WA – have been to HMAS Stirling, the Water Corporation and Curtin University.

The annual forum, which has been running for 30 years, gives students information about the options available to them in biomedicine, engineering and computer science, physics, chemistry, biology, and earth and environmental sciences.

Students are selected by their local Rotary clubs not only for their interest and skill in science, but also for their ability to communicate and for their involvement in the wider community.

The forum allows students to learn how to make informed decisions about courses and careers in the sciences.

Labrat: Esperance Senior High School student Alicia Jackson attends UWA's Clinical Training and Evaluation Centre (CTEC) as part of the National Youth Science Forum.
Photo supplied.



Students acknowledged for caring about environment

By ELIZABETH LANGDALE

SEVERAL primary school students have been acknowledged by Esperance Regional Forum (ERF) for their active interest in caring for the region's environment.

Primary school students Eden Copeland (Esperance), Harriet Wildberger (Our Lady Star of the Sea), Tegan Hallam (Grass Patch), Dylan Corby (Nuisen), Georgia Hamilton (Cascade), Hannah Revel (Cordingup) and Lee Buckingham (Jerdacuttup) were all presented with awards.

ERF volunteer management committee members Marie Fowler, Marg Agnew, Rob Simpson, Hilary Macmillan and Yvonne Hallam presented the awards to the recipients last month.

ERF executive officer Jane McKenzie-Smith said the purpose of the awards was to highlight the stu-

dents' efforts and recognise the efforts of the schools to encourage a new generation of people, who were passionate about caring for their environment and natural resources.

"The Young Environmentalist Award recognises the enthusiasm, hard work and commitment of an individual student in caring for our local environment and inspiring others to do the same," she said.

"Esperance is blessed with rich natural resources and it is so important for us to have people in the community who treasure them and ensure they are here to enrich future residents and generations."

For more information about the awards, contact Jane McKenzie-Smith on 9076 2202 or email admin@esperanceregionalforum.org.au.



Environmental education: Cascade and Grass Patch Primary School students participate in the Esperance Regional Forum Biodiversity Education Program at the Lort River. The students are measuring water quality of the river.
Photo supplied.

John Holland Pty Ltd

Esperance Port Access Corridor Project

Expressions of interest for experienced plant hire companies and owner operators for the Esperance Port Access Corridor Project

The following equipment is required for an immediate start:

- Wet hire Rubber Wheeled Excavator

Interested applicants email epac.info@jhg.com.au and request an invitation to tender form.

"John Holland is an equal opportunity quality assured employer"

Fruitful morning for twitchers in the sun

MEMBERS of the Esperance Bird Observer Group braved hot weather to search for native bird species at Lake Windabout on Sunday.

Group member Mike Gibbs said 14 water bird and wader species were seen in addition to seven bush bird species.

"There were five types of duck - the Australian shelduck, chestnut teal and grey teal, hardhead and pacific black," he said.

"Other interesting water birds spotted on the day were red-kneed dotterel and two nankeen night herons.

"We then headed to the eastern edge of Lake Warden, where there were surprisingly few birds, although we saw the elegant red-necked avocet and red capped plover, the small sand-running birds."

After a successful morning of bird spotting, the group decided to call it quits around noon.

"As it was getting too hot for comfort, it was decided to end the outing at midday," Mr Gibbs said.

He said the Esperance region was home to a number of unique and fascinating species.



Local specimen: A red-kneed dotterel races over the sand spotted by the Esperance Bird Observer Group on Sunday.

Science stars of the future

SIXTY labs in 12 days was the aim of the National Youth Science Forum, held at the University of Western Australia from January 6-18.

The NYSF helps students moving into year 12, who wish to follow careers in science, engineering and technology by introducing them to research and researchers, by encouraging the achievement of excellence in all their undertakings, and by helping to develop their communication and interpersonal skills.

Esperance Senior High School student Alicia Jackson was the first student chosen from the school in six years to attend the forum.

She visited UWA's Clinical Training and Evaluation Centre (CTEC) to learn about aspects of medicine including laparoscopy and suturing.

CTEC has become the most established medical simulation training centre in the Asia Pacific region since its inception in 2000.

It has trained more than 25,000 medical professionals in some 2000 training courses.

Alicia said she hopes to become

more familiar with the centre after finishing year 12.

As well as visiting UWA, the 144 students – 10 from WA – have been to HMAS Stirling, the Water Corporation and Curtin University.

The annual forum, which has been running for 30 years, gives students information about the options available to them in biomedicine, engineering and computer science, physics, chemistry, biology, and earth and environmental sciences.

Students are selected by their local Rotary clubs not only for their interest and skill in science, but also for their ability to communicate and for their involvement in the wider community.

The forum allows students to learn how to make informed decisions about courses and careers in the sciences.

Labrat: Esperance Senior High School student Alicia Jackson attends UWA's Clinical Training and Evaluation Centre (CTEC) as part of the National Youth Science Forum.
Photo supplied.



Students acknowledged for caring about environment

By ELIZABETH LANGDALE

SEVERAL primary school students have been acknowledged by Esperance Regional Forum (ERF) for their active interest in caring for the region's environment.

Primary school students Eden Copeland (Esperance), Harriet Wildberger (Our Lady Star of the Sea), Tallan Hallam (Grass Patch), Dylan Corby (Nulsen), Georgia Hamilton (Cascade), Hannah Revel (Condingup) and Lec Buckingham (Jerdacuttup) were all presented with awards.

ERF volunteer management committee members Marie Fowler, Marg Agnew, Rob Simpson, Hilary Macmillan and Yvonne Hallam presented the awards to the recipients last month.

ERF executive officer Jane McKenzie-Smith said the purpose of the awards was to highlight the stu-

dents' efforts and recognise the efforts of the schools to encourage a new generation of people, who were passionate about caring for their environment and natural resources.

"The Young Environmentalist Award recognises the enthusiasm, hard work and commitment of an individual student in caring for our local environment and inspiring others to do the same," she said.

"Esperance is blessed with rich natural resources and it is so important for us to have people in the community who treasure them and ensure they are here to enrich future residents and generations."

For more information about the awards, contact Jane McKenzie-Smith on 9076 2202 or email admin@esperanceregionalforum.org.au.



Environmental education: Cascade and Grass Patch Primary School students participate in the Esperance Regional Forum Biodiversity Education Program at the Lort River. The students are measuring water quality of the river.
Photo supplied.

John Holland Pty Ltd

Esperance Port Access Corridor Project

Expressions of interest for experienced plant hire companies and owner operators for the Esperance Port Access Corridor Project

The following equipment is required for an immediate start:

- Wet hire Rubber Wheeled Excavator

Interested applicants email epac.info@jhg.com.au and request an invitation to tender form.

"John Holland is an equal opportunity quality assured employer"

Fruitful morning for twitchers in the sun

MEMBERS of the Esperance Bird Observer Group braved hot weather to search for native bird species at Lake Windabout on Sunday.

Group member Mike Gibbs said 14 water bird and wader species were seen in addition to seven bush bird species.

"There were five types of duck - the Australian shelduck, chestnut teal and grey teal, hardhead and pacific black," he said.

"Other interesting water birds spotted on the day were red-kneed dotterel and two nankkeen night herons.

"We then headed to the eastern edge of Lake Warden, where there were surprisingly few birds, although we saw the elegant red-necked avocet and red capped plover, the small sand-running birds."

After a successful morning of bird spotting, the group decided to call it quits around noon.

"As it was getting too hot for comfort, it was decided to end the outing at midday," Mr Gibbs said.

He said the Esperance region was home to a number of unique and fascinating species.



Local specimen: A red-kneed dotterel races over the sand spotted by the Esperance Bird Observer Group on Sunday.

1.2 Wetland Conservation for the Birds - Esperance Express (02/04/2014)

Wetland conservation for the birds

By ELIZABETH LANGDALE

COMMALBIDGUP birds are benefiting from wetland conservation work carried out by farmers Peter and Barb Terrell on their family property, located west of Esperance.

The Esperance Regional Forum project was funded through the Caring For Our Country program and involved the erection of 13 kilometres of fencing and weed control.

Esperance Regional Forum chairwoman Marg Agnew said the Terrells' fenced wetland and lakes systems had created a haven for a wide range of bird species.

Ms Agnew said such projects were of immense value in terms of natural resource management and it was astounding to see what could happen once an area was protected from grazing by livestock.

"What I have noticed is that once a fence is erected around degraded areas and stock are excluded, it is amazing that in a few months the natural vegetation can regenerate, improving water and soil quality in the surrounding environment," she said.

ERF project officer Claudia Magana said during a recent outing on the property located 3 km west of Coomalbidgup Swamp, Esperance Bird

Observers Group, Esperance Regional Forum, Bird Life Australia and South Coast NRM surveyed birds enjoying the protected wetlands.

"We noted the different species from a salt lake with mud flats and from fresh water yate swamps," she said.

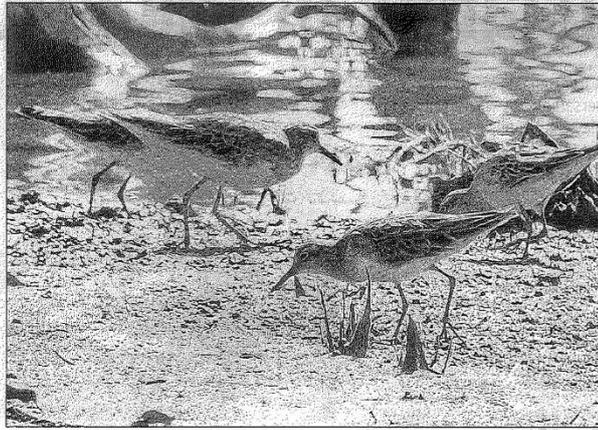
"Species seen included common greenshanks and red necked avocets."

Other species sighted during the outing included Australasian darter, Australian shelduck, banded stilt, black-winged stilt, Eurasian coot, musk duck, red-necked avocet, sharp-tailed sandpiper, white-faced heron, Australasian shoveler and grey teal.

Ms Magana praised the efforts of the Terrell family.

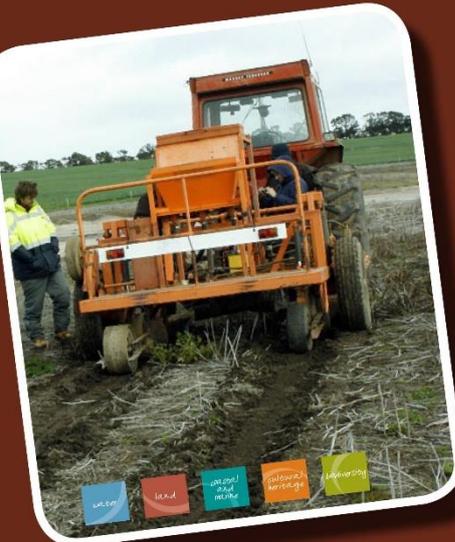
"It is truly wonderful to see the work the Terrells have done to maintain these magical places," she said.

For more information about Esperance Regional Forum (ERF) or learn more about how ERF can assist you in undertaking fencing and re-vegetation on your property visit esperanceregionalforum.org.au or contact executive officer Jane McKenzie-Smith on 9076 2202 or email admin@esperanceregionalforum.org.au.



Birds content: Sharp-tailed sandpiper seen on the bird outing on March 16.
Photo: Supplied

1.3 Direct seeding workshop advertisement - Esperance Express (March 2014)



Discover More About ... Direct Seeding

You are invited to attend to one of our **FREE** workshops and learn more about the art of direct seeding.

Restoration and native plant agronomist Dr Geoff Woodall will be on-hand to share his practical and technical expertise on the latest best practice for direct seeding of native vegetation.

The workshops will include:

- An overview of key steps to ensure direct seeding success.
- Site preparation.
- How to get success with difficult sites such as non-wetting gutless sands.
- Seed germination biology.
- Weed and pest control.
- Considerations when placing seed orders.
- Integrating seed with seedlings.

There will also be on-site demos of direct seeding equipment covering all aspects of how to operate machinery.

The workshops will take place in:

Esperance, from 9am - 3.30pm on Thursday, March 20 at the Esperance Natural Resource Centre, Unit 3, 113 Dempster Street - including a site demo.

and ...

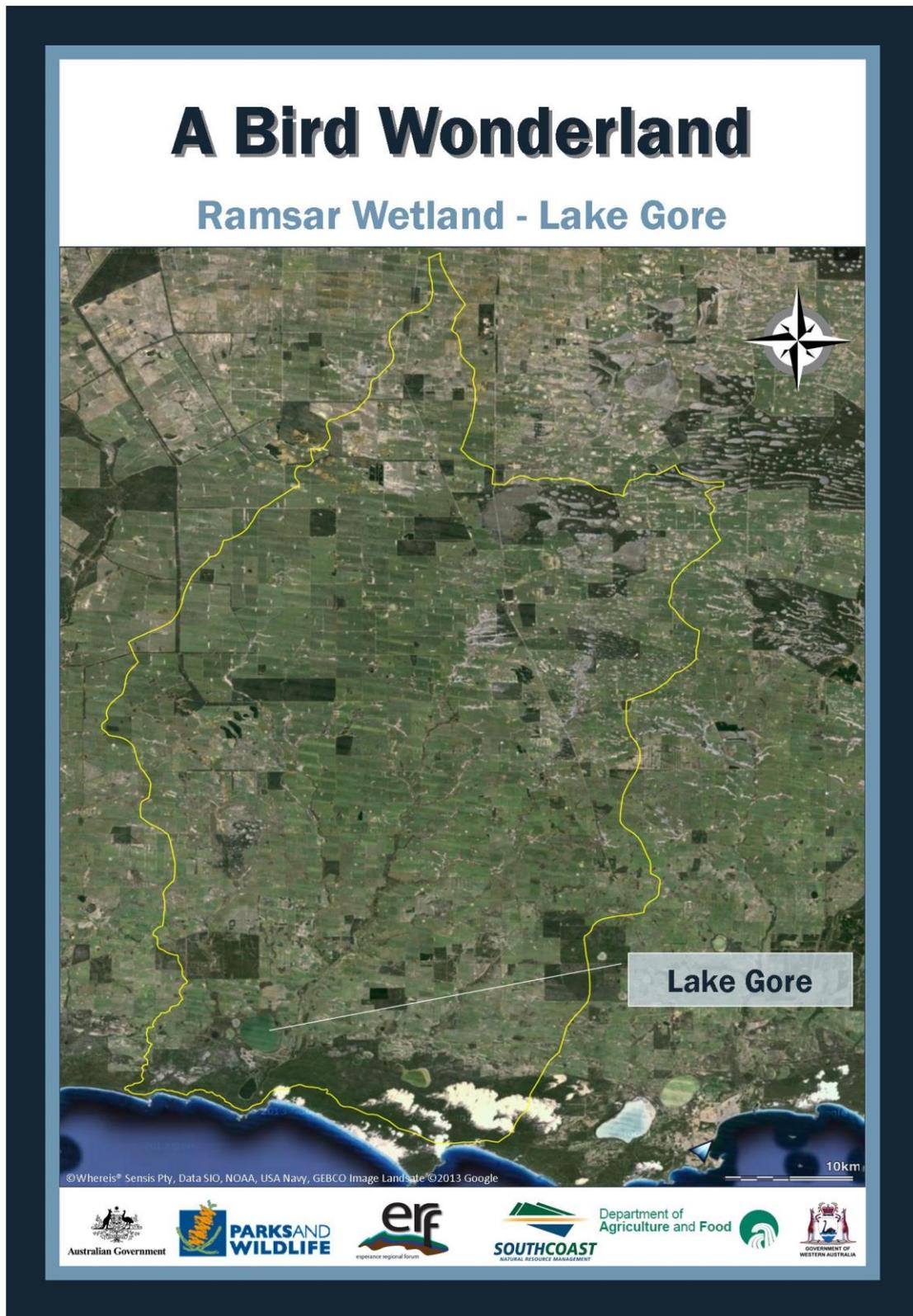
Hopetoun, from 9am - 3.30pm on Friday, March 21 at the Hopetoun Progress Conference Room, Veal Street, plus a site demo at 831 Springdale Road.

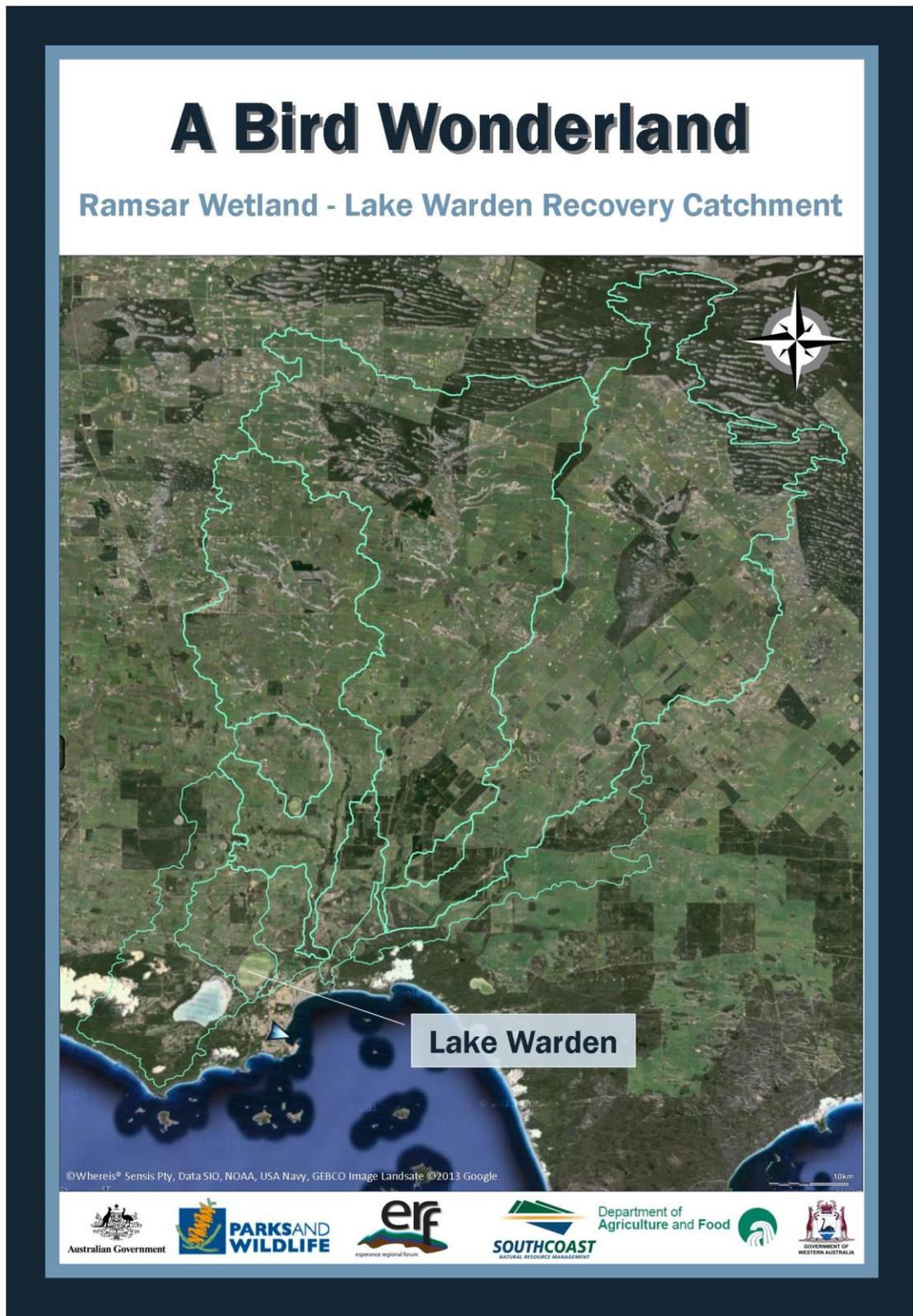
Please RSVP for catering by 5pm, Monday, March 17 to:

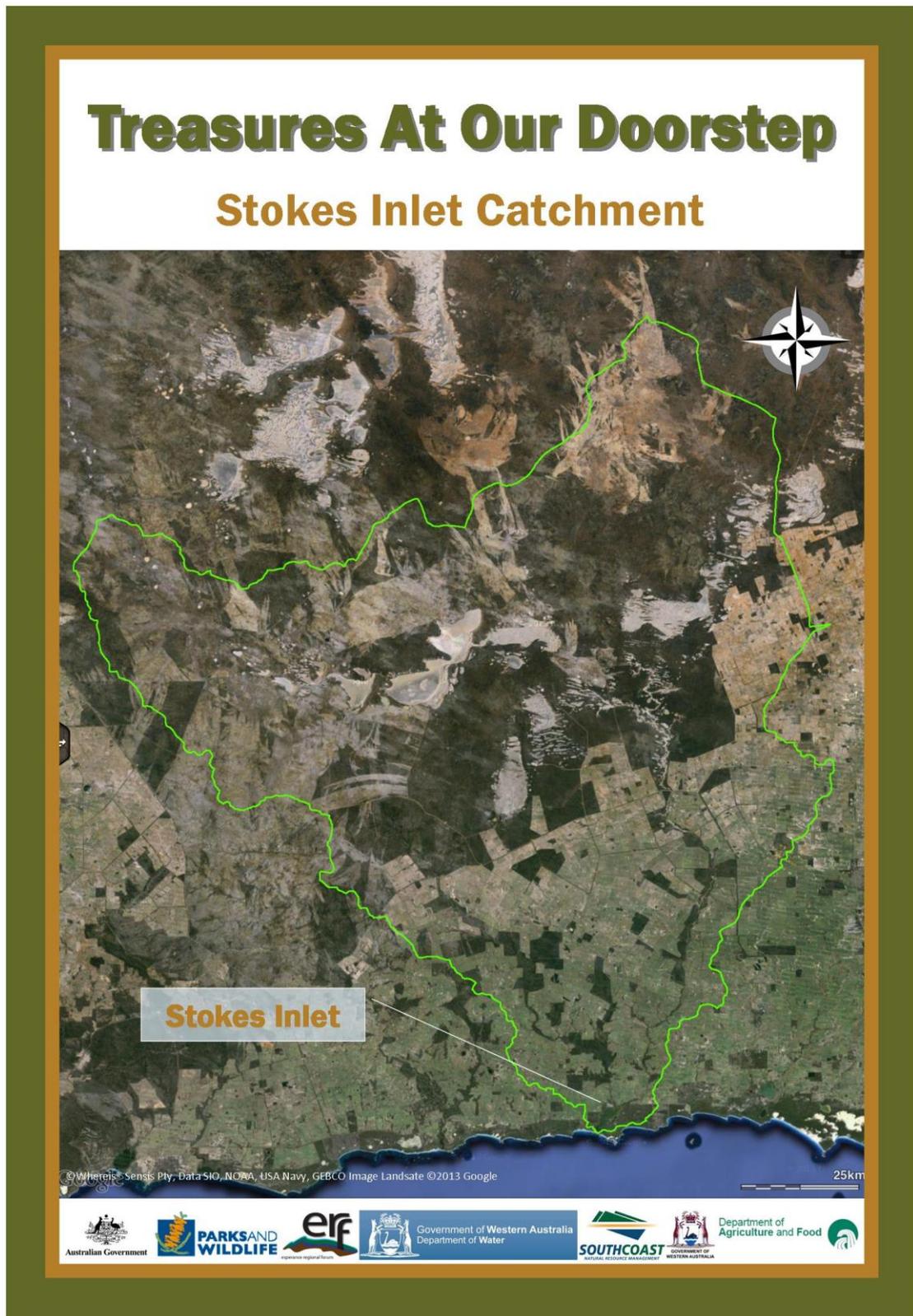
robync@southcoastnrm.com.au or claudiam@southcoastnrm.com.au or phone 9076 2200.

2.0 Media - Posters/Flyers

2.1 Lake Gore catchment Map (October 2013)

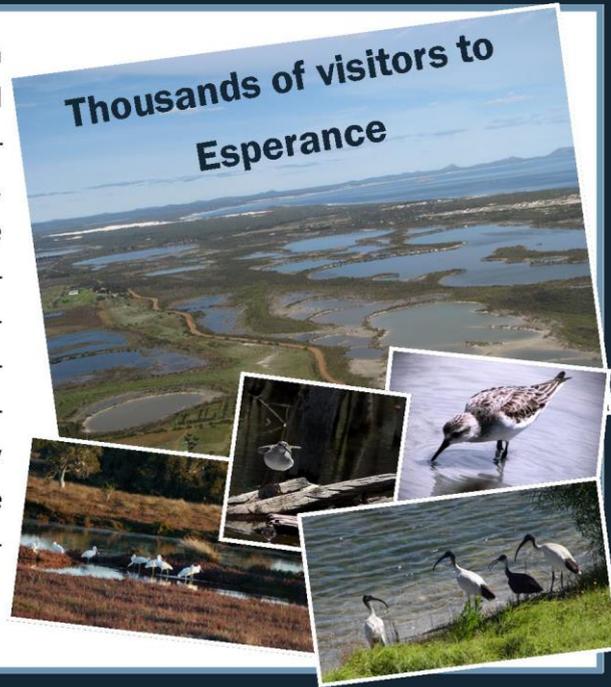






2.4 Lake Warden Story 1 (October 2013)

Each year the Lake Warden Ramsar wetlands are flooded with thousands of winged visitors from all over the world. Coming to rest and feed in the mudflats of the wetlands systems of the Lake Warden Recovery Catchment. The catchment includes four sub catchments Neridup Creek, Bandy Creek, Coramup Creek and the Esperance Western Lakes covering a total of 171,000 ha.



2.5 Lake Warden Story 2 (October 2013)



Ramsar Wetland

Lake Warden was listed as a Ramsar wetland because it provides significant water bird habitat and a refuge to some rare, vulnerable or endangered birds. It's among the most important sites in South Western Australia for Chestnut Teal and the Hooded Plover.

Birds

Our visitors don't weight any more than a mars bar by the time they get to Lake Warden wetland system. They are the reason the wetlands was designated as a Wetland of International Importance under the Ramsar convention in 1990.



2.6 Lake Warden Story 3 (October 2013)

Drowning Trees

However, an altered hydrological regime is changing the ecological character of the Lake Warden system. Catchment clearing and unseasonal rainfall events have exacerbated the effects of catchment clearing. This means that the shore zone and wading habitat for water birds is reduced. It has also impacted on vegetation where the extent and duration of inundation has exceeded natural threshold, resulting in death of riparian vegetation.



2.7 Lake Warden Story 4 (October 2013)

Re-vegetation - Seedlings Growing Strong

Esperance Regional Forum, South Coast NRM and partners have been working together to address the threats as well as improve the natural health and values of the catchment. Through funding from the Australian Government, incentives have been provided to land managers for practices such as fencing of remnant vegetation, perennial pasture establishment and re-vegetation.

Results and benefits of these activities can be seen across the catchment. One such site is a paddock owned by Gwen & John Iwankiw. This paddock was prone to wind erosion, water logging, and has shown

signs of increasing salinity. By fencing off this area it has allowed for the vegetation to come back and increase the survival of planted trees.



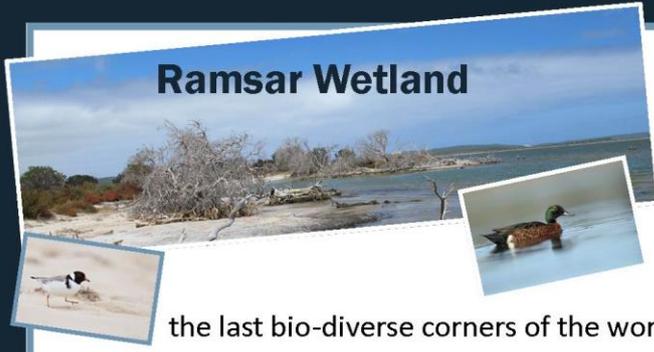
2.8 Lake Gore Story 1 (October 2013)

Lake Gore is located 35 km west of the town of Esperance, covering 82,607 ha which includes the Dalyup and West Dalyup Rivers. Lake Gore is found at the bottom of the catchment adjacent to lakes Carbul, Kubitch and Gidong Lake to the west and Quallilup Lake to the South.

Lake Gore is classified as a RAMSAR wetland listed as a "Wetland of International Importance". The significance of being a Ramsar wetland is that Lake Gore wetland provides significant habitat and feeding grounds for a diverse range of local and international bird life.



2.9 Lake Gore Story 2 (October 2013)



Ramsar Wetland

The unique nature of this wetland and its neighboring catchments is the focus of catchment wide initiatives to improve and preserve one of the last bio-diverse corners of the world for future generations.

Esperance Regional Forum, South Coast NRM and partners have been working together to improve the natural health and values of the catchment.

Through funding from the Australian Government, incentives have been provided to land managers for practices such as fencing of remnant vegetation, perennial pasture establishment and re-vegetation.



3.0 Direct seeding workshop Esperance flyer (March 2014)



Discover More About ... Direct Seeding

Come along to our **FREE** workshop and learn more about the art of direct seeding. Restoration and native plant agronomist Dr Geoff Woodall will be on hand to share his practical and technical expertise on the latest best practice for direct seeding of native vegetation.

The workshop will include:

- An overview of key steps to ensure direct seeding success.
- Site preparation.
- How to get success with difficult sites such as non-wetting gutless sands.
- Seed germination biology.
- Weed and pest control.
- Considerations when placing seed orders.
- Integrating seed with seedlings.

There will also be on-site demos of direct seeding equipment covering all aspects of how to operate machinery.

The workshop will take place on:
9am - 3.30pm, Thursday, March 20
at Esperance Natural Resource Centre, Unit 3, 113 Dempster Street, Esperance, including a site demo.

PLEASE NOTE: Attendees must wear closed-in shoes, hats, a long sleeved top and long trousers.
High visibility vests will be supplied.

Please RSVP for catering by 5pm, Monday, March 17 to:
South Coast NRM
Esperance project officer
Claudia Magana on 9076 2200 or claudiam@southcoastnrm.com.au



3.1 Direct seeding poster (October 2014)



2014 Combination re-vegetation with native seed and seedlings (Springdale Road, Department of Water site)



Direct seeding machine

Revegetation using direct seeding

Save time & money by combining planting seedlings with sowing seeds

Re-vegetation and rehabilitation can now be achieved in a quicker and more cost effective method by direct sowing (seed) of native species. This also gives access to a wider variety of species than ever before.

South Coast Natural Resource Management and Esperance Regional Forum have the equipment and expertise to help you get your revegetation program under way.

The results on Springdale Road site after 3 months shows germination which is encouraging for a sandy site. The results on Daylup after three years show a more vigorous growth compared to tube stock plantings.

To find out more, please call us!

Contact:
 South Coast NRM—Esperance
 Ph: 08 9076 2200
 Esperance Regional Forum
 Ph: 08 9076 2200



Before After



3.2 Migratory shorebird flyer (April 2015)



SOUTHCOAST
NATIONAL RESOURCE MANAGEMENT

birdlife
AUSTRALIA

Australian Government

South Coast NRM and Bird Life Australia
are hosting a
Native Shorebird Workshop
9am-5pm Tuesday, April 28
Cliff's Room, Esperance Bay Yacht Club

This event will feature a half-day theory and a half-day field trip - details to be confirmed
Presenters will be *Dan Weller* and *Kimberly Onton* from Birdlife Australia

Please register by Friday, April 24 to:
Claudia Magana on 9076 2206 or claudiam@southcoastnrm.com.au

Photo: Emily Gummer, Youth in NRM CAPTURE NATURE!
2015 photography competition entrant.

4.0 Media – electronic news (Facebook)

4.1 Castletown quays beach weed activity (21/04/2014)



Esperance Weeds Action Group
Posted by Claudia Magana [?] · November 21, 2014

Productive hour spent tackling the Victorian Tea Tree and succulents — at Castletown quays Beach.



107 people reached [Boost Post](#)

Like · Comment · Share 👍 4 🔄 2 Shares 🌱

4.2 Shorebird workshop FB post (17/04/2015)

SOUTHCOAST
NATURAL RESOURCE MANAGEMENT

birdlife
AUSTRALIA

Australian Government

South Coast NRM and Bird Life Australia
are hosting a
Shorebird Workshop
9am-5pm Tuesday, April 28
Cliff's Room, Esperance Bay Yacht Club

This event will feature a half-day theory and a half-day field trip - details to be confirmed
Presenters will be *Dan Weller* and *Kimberly Onton* from Birdlife Australia

Please register by Friday, April 24 to:
Claudia Magana on 9076 2206 or claudiam@southcoastnrm.com.au

Timeline Photos Options Share Send

South Coast Natural Resource Management Inc.
Page Liked · April 17 · Edited

Interested in shorebirds? Come along to this great free workshop in Esperance on the 28th of April. Places are limited so please RSVP to claudiam@southcoastnrm.com.au

Unlike · Comment · Share

You, *Kylie Bishop*, *Caitlin Jackson* and 7 others like this.

6 shares

Claudia Magana Here is the Red-necked Stint, just one of the many shorebirds we'll be learning about in the workshop. If your interested in see more amazing photos check out the Shorebird 2020 group page. <https://www.facebook.com/groups/1418257811799491/>

Unlike · Reply · 3 · April 20 at 1:03pm · Edited

Write a comment...

5.0 Media – electronic news (Newsletters)

5.1 WA South Coast Shorebird network Newsletter Vol.10

WA South Coast Shorebird network Newsletter - Vol. 10 - Esperance s...

<http://www.greenskills.org.au/pub/sb10/sb10e.html>



- Home
- Projects
- Ecojobs
- Community Education
- Upcoming Events
- About Us
- Contact Us

Projects publications



- Cover & Introduction
- Festival of Birds
- Farewell Shorebirds
- Grey Plover Tracking
- Shorebird Survey
- Esperance Workshop
- Upcoming Events
- Farewell Kim and Ken
- Media Coverage
- Wilson Inlet Mgmt
- Further Resources

PDF version

- Other Volumes:**
- Volume 1 - April 2011
- Volume 2 - July 2011
- Volume 3 - Jan 2012
- Volume 4 - May 2012
- Volume 5 - Jan 2013
- Volume 6 - May 2013
- Volume 7 - Jan 2014
- Volume 8 - June 2014
- Volume 9 - Feb 2015

WA South Coast Shorebird network Newsletter - Vol. 10

Recent events - Esperance shorebird workshop

On 28 April 2015, BirdLife Australia's Shorebirds 2020 Program Manager David Weller and WA coordinator Kim O'Connell presented a shorebird workshop to the local community in Esperance. The brief one-day visit was facilitated by South Coast NRM.

The workshop was well-attended with almost 30 participants, including members of the Esperance Bird Observers Group (EBOG), the Esperance Anglican Community School biology students, Parks and Wildlife and South Coast NRM personnel and other members of the local community.

The event commenced at the Esperance Yacht Club with a series of presentations from David about the fascinating ecology of shorebirds, their amazing migrations and how to identify them. After the classroom session, we feasted on a delicious lunch before heading out into the field to enjoy the stunning weather and put our identification skills to the test.



Our first destination was Mullet Lake just outside the Esperance town site. From here we set up the telescopes and observed Red-necked Stilt, Red-capped Plovers, Masked Lapwing and Curlew Sandpiper that were coming in to their stunning breeding plumage.



Next we headed to Lake Baitup, a fantastic site accessed through the property of EBOG's Dale Johnson. Here the drying lake provided views of Red-necked Stilt, Red-capped Plover and to our delight a Double-banded Plover. The day wrapped up with afternoon tea in the field before we all headed home.



Thanks to everyone involved, particularly South Coast NRM's Claudia Magara for coordinating the workshop, EBOG's Kerrie and BirdLife Australia's Deb Sullivan for assisting in field site selection and Dale Johnson for allowing access to her property.

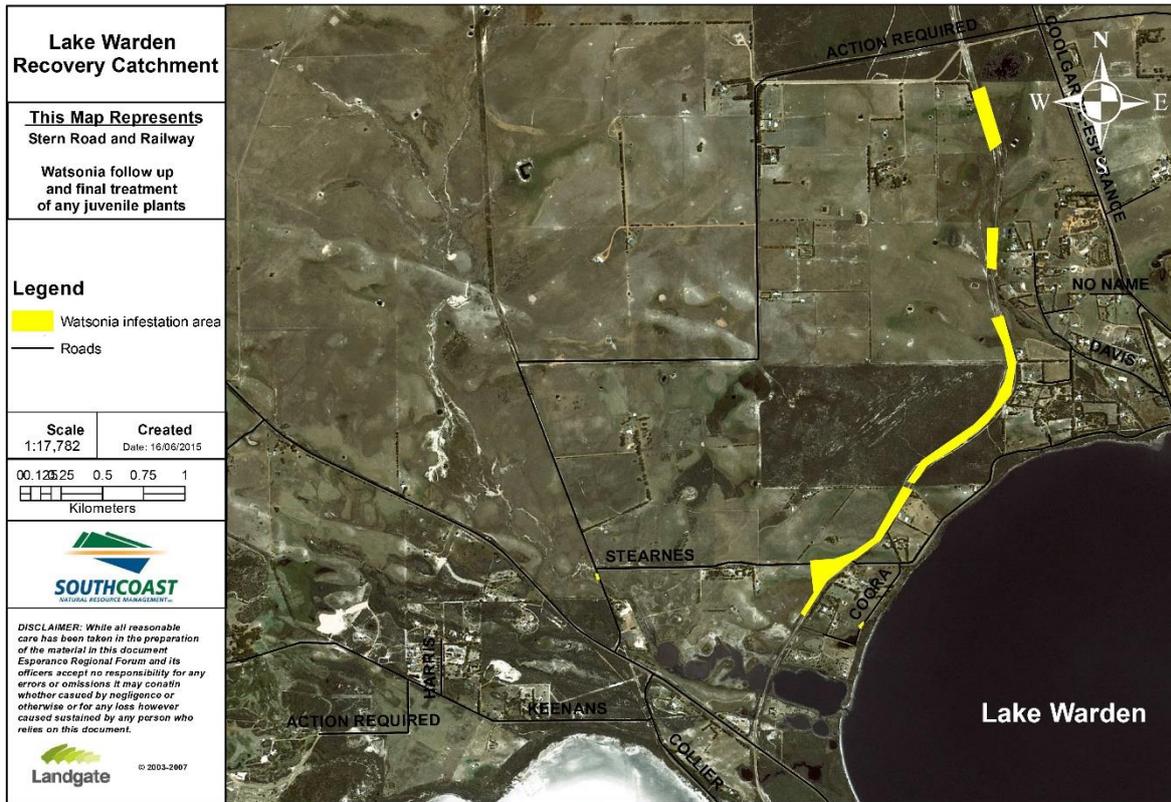
Photos - Claudia Magara, South Coast NRM

Article - Kim O'Connell



6.0 Media - Map

6.1 Map of Watsonia Lake Warden



6.2 Map of Blackberry Bandy Creek



7.0 Media - Photo monitoring

7.1 Monitoring Weed Watsonia FP1

Treatment of Watsonia FP1

Overall Map

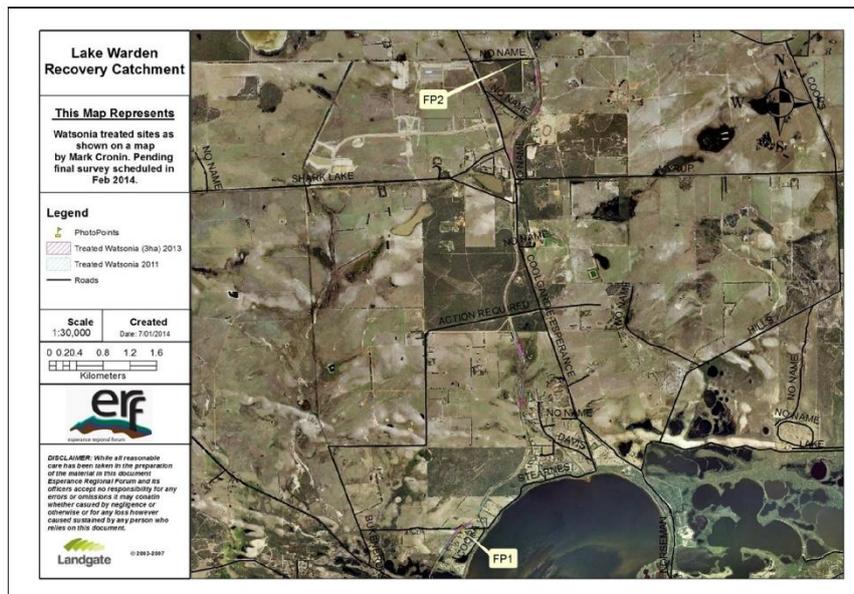


Photo Point: FP1-1 before treatment Gibson Road

Photo point location: Corner Stearns Rd & railway line Catchplan Ref: FP1-1	Date: 9 Dec 2013	Time: 08:10 am
Location details: The intersection of Stearns Road and the railway line. Infestation of Watsonia weeds along the verges and on either side of the railway line.	Compass bearing/Direction of photo (left to right of image): WSW to NE	GPS: Lat: -33.813473 Y_proj: Long: 121.854501 X_proj:
Lens type/other camera settings: iPad 1/4329 sec, F/2.4, Focal length 4 mm, ISO-50	Photographer's name: Claudia Magana	
Purpose of photo: To confirm that the treatment has worked. To monitor over time whether further treatment will be required.		



Image facing west



Image facing north

7.2 Monitoring Weed *Watsonia* FP2

Treatment of *Watsonia* FP2

Overall Map

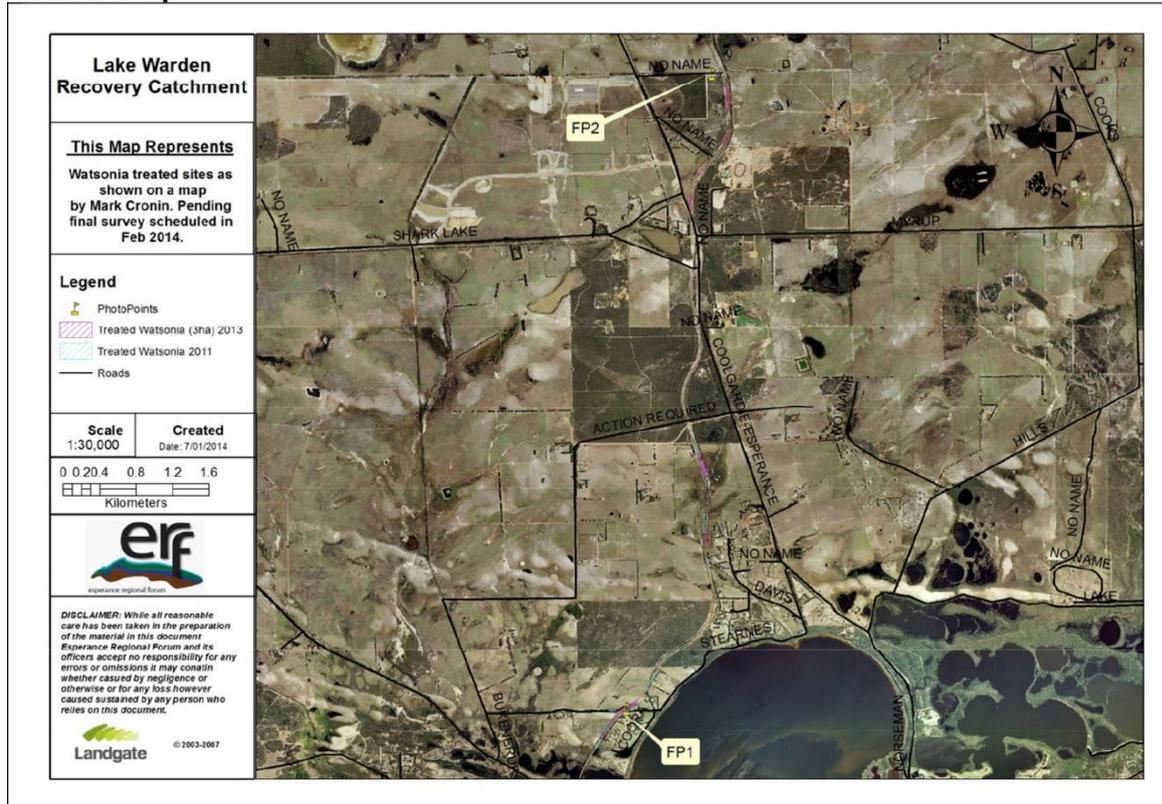


Photo Point: FP2-1 before treatment Gibson Road

Photo point location: Gibson Road 50m from railway line Catchplan Ref: FP2-1	Date: 6 Nov 2013	Time: 15:47 pm
Location details: Small patch of <i>Watsonia</i> found 100m from railway intersection on Gibson road.	Compass bearing/Direction of photo (left to right of image): East	GPS: Lat: -33.750022 Y_proj: Long:121.866103 X_proj:
Lens type/other camera settings: Nikon SLR	Photographers name: Kylie Bishop	
Purpose of photo/site observations: To document the location of the weed and to confirm that the treatment has worked by following up with a post treatment photo. And to monitor over time whether further treatment will be required.		



Image facing east

Photo Point: FP2-2 after treatment Gibson Road

Photo point location: Gibson Road 50m from railway line Catchplan Ref: FP2-2	Date: 6 Dec 2013	Time: 15:47 pm
Location details: Small patch of Watsonia found 100m from railway intersection on Gibson road.	Compass bearing/Direction of photo (left to right of image): East	GPS: Lat: -33.750022 Y_proj: Long:121.866103 X_proj:
Lens type/other camera settings: Apple ipad 1/458 sec, F/2.4, Focal length 4 mm, ISO-50	Photographers name: Kylie Bishop	

Purpose of photo/site observations:

To document the location of the weed and to confirm that the treatment has worked by following up with a post treatment photo. To monitor over time whether further treatment will be required.



Image facing east