

Moore Catchment Council

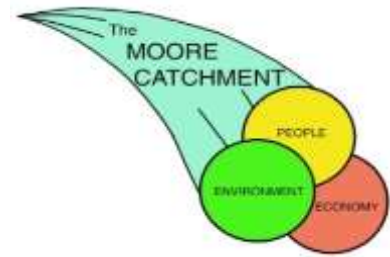


Photo: Keith Lightbody

Annual Report 2013/2014

"To maintain and improve the health of the Moore River environment by communicating natural resource management and encouraging maximum sustainable use of resources."



Australian Government



Table of Contents

1	Foreword.....	1
2	Staff and Committee:.....	2
3	Chairpersons Report:.....	4
4	Executive Officer Report:.....	5
5	Financial Report:.....	6
6	Auditors Report:.....	10
7	Projects:.....	11
7.1	Grant to Volunteer Environment, Sustainable and Heritage Organisations.....	11
7.2	Demonstrating elite fodder shrubs for future productive use in the NAR.....	11
7.3	Planting feed species for Carnaby’s Black-Cockatoo in the Moora and Koobabbie Important Bird Areas.....	15
7.4	“Demonstrating different establishment techniques of perennials in deep sand.....	18
7.5	North Guilderton Restoration Project.....	19
7.6	Conservation of Candy’s Bush Reserve through Traditional & Ecological knowledge sharing.....	20
7.7	Planting feed species for the endangered Carnaby’s Black-Cockatoo (Calyptorhynchus latirostris) in the Northern Swan Coastal Plain Important Bird Area.....	21
7.8	Reconnecting fragmented Malleefowl (Leipoa ocellata) habitat near Maya, WA.....	23
7.9	“Interpretative Signage for the Guilderton Estuary”.....	24
7.10	“Exploring the Turquoise Coast’s rehabilitation projects”.....	25
8	Workshops & Field Days.....	27
8.1	MCC Annual General Meetings & Meetings Round Up.....	27
8.2	Agricultural Shows.....	28
8.3	Heavenly Hectares Workshop.....	29
8.4	State NRM Tipping Point Conference.....	30
9	Moore Catchment Council Activities.....	31
9.1	Railway tree decline.....	31
9.2	Moore Catchment Environmental Fund.....	32
9.3	MCC Grant Applications.....	32
9.4	Moore Catchment Support.....	35

1 Foreword

The Moore Catchment Council (MCC) is a not-for-profit organisation focussing on the protection and enhancement of the Moore River and its catchment.

MCC has a 15 year track record of attracting natural resource management grants and successfully completing projects that improve the Moore River catchment.

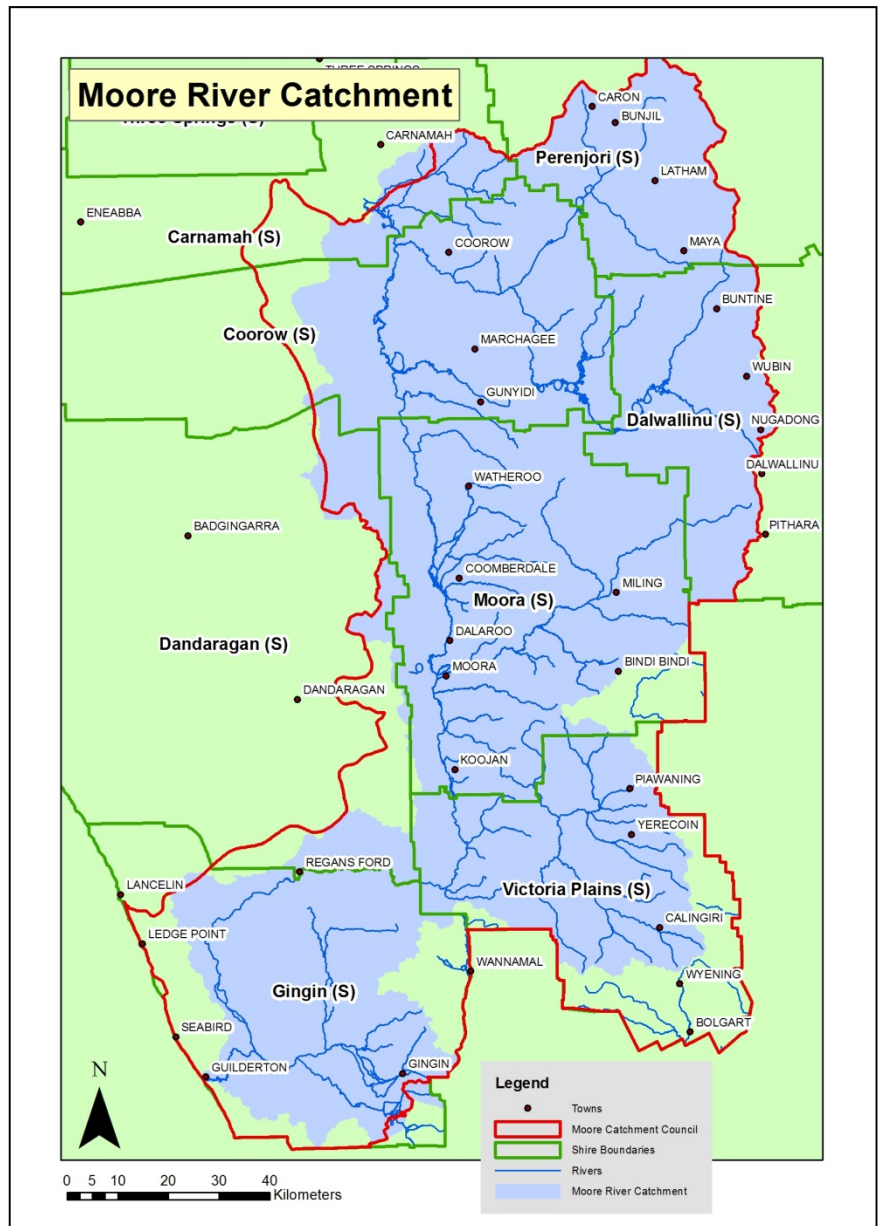
The immense diversity of the catchment is reflected in Moore River's Industries. The Moore River rises in the old geological zone of the Yilgarn Craton, crossing the Swan Coastal plain and discharges to the ocean at Guilderton

Industries of the Moore River Catchment include:

- Broad acre agriculture
- Horticulture and viticulture
- Fishing
- Eco and Heritage Tourism
- Mining
- Holiday destination
- Sea & Tree change lifestyles

Our Natural Resource Management officers can:

- Source technical information by liaising between experts in fields such as hydrology and heritage
- Facilitate local and regional linkages with Federal, State and Regional natural resource management programs.
- Assisting in the development and co-ordination of projects and sourcing of funding.
- Facilitate workshops and identify NRM training needs.



2 Staff and Committee:

Moora Office:

1 Padbury Street

P.O Box 337

Moora WA 6507

Phone 08 9653 1355 Fax 08 9653 1366

Website: moorecatchment.org.au

Facebook: www.facebook.com/moore.catchmentcouncil

Staff Summary

Over this year we have employed:

Natural Resource Management Officer's (NRMO):



Rachel Walmsley has been a NRMO for MCC since early 2008. With a background in Earth Science and six years in waste management, Rachel emigrated to Western Australia in 2007 with her partner Andrew. During her time with MCC, she has successfully obtained funding for a number of projects including salt land reclamation using saltbush in conjunction with the Moora-Miling Pasture Improvement Group, remnant bushland conservation on private and public land, Carnaby's Black Cockatoo conservation, sustainable agriculture practices, Aboriginal engagement activities and coastal rehabilitation programs. Rachel enjoys working at a local level with the community to protect the Moore's assets and better appreciate the natural environment around them.



Julia White Julia has recently joined the MCC after graduating from Murdoch University with a Bachelor of Science degree majoring in Environmental Restoration and Conservation and Wildlife Biology.

Julia was born in South Africa and immigrated to Perth when she was a child. Julia is passionate about environmental conservation and restoration, particularly within wetland systems. Julia hopes to use her skills and knowledge acquired at university to help protect the Moore Catchments natural resources. Julia finished her Internship with Moora Catchment Council in August, 2013

Helen Watkins – Executive Officer



Helen joined the team in September 2008; Helen lives in Dandaragan with husband Paul where they run an Agricultural Contracting Business.

Helen has the role of Executive Officer of the Moore Catchment Council and works 12 hours per week. Her key responsibilities are administering the Finances and doing the day to day administration of the group, keeping projects on track, updating the website, keeping data bases up to date and informing members what is happening with the MCC.

MCC Committee:

Chairperson:	Reg Beale		
Vice Chairperson:	Tony White		
Secretary:	Jennifer Bairstow		
Treasurer:	Lawrie Short		
Committee:	John Braid	Peter Waterhouse	Duncan Peter
	Kay Reid	Sarah Mason	

Executive Committee

Chairperson:	Reg Beale
Vice-Chairperson:	Tony White
Secretary:	Jennifer Bairstow
Treasurer:	Lawrie Short
	Duncan Peter



New Moore Catchment Council Committee - Left to right Reg Beale (Chairperson), Jennifer Bairstow (Secretary), Sarah Mason, John Braid, Lawrie Short (Treasurer)



3 Chairpersons Report:

Another year has passed and the funding challenges facing Moore Catchment Council have not lessened and staff and committee have sourced all possible available funding.



With the new constitution now in place your Committee have moved forward in seeking other ways of funding Moore Catchment Council in our endeavours to better service community and business environmental issues. As one would appreciate these funding issues challenge us each day as we approach the future of climate change and the delicate government agendas, state and federal.

As indicated previously there have been a number of new forums aimed at assisting co-ordinated interaction between the various environmental groups to endeavour to get better mileage out of the limited grants available and once again although the political arena appears to acknowledge various environmental issues there never seems to be the dedication when it comes to funding and grants.

Where to from here is the challenge facing your new Committee and our future is dependent on how successful we are in the grant or sponsorship area.

Thanks to our competent staff we have attained our milestones for 2013/14

Despite the funding challenges our NRMO Rachel has been getting on with the task at hand so that MCC meets its contract project deadlines and at the same time conducting community information and site visit sessions. New milestones are in place which keep our sole NRMO Rachel well occupied.

In closing, I record my and the committee's appreciation to our EO Helen Watkins for a job well done in her application for grant funding and the acquittal of all grants received and attending to day to day tasks liaising between our many counterparts in the environment including NACC.

My appreciation is once again recorded to our NRMO Rachel and members of the Committee for their support and input during the past 12 months.



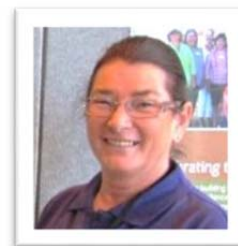
Regards

Reg Beale.



4 Executive Officer Report:

2013-2014 Financial year saw the completion of 4-MCC project funded by NACC, Community Action Grant "Demonstrating elite fodder shrubs for future productive use in the NAR", State NRM Program "Planting feed species for Carnaby's Black-Cockatoo in the Moora and Koobabbie Important Bird Area"



New & Existing Grants

- 👉 NACC – "North Guilderton Restoration Project" \$55,000
- 👉 Australian Government GVESHO Program \$4,000
- 👉 Community Landcare Grant - "Demonstrating different establishment techniques of perennials in deep sand" \$10,900
- 👉 State NRM Program – "Conservation of Candy's Bush Reserve through Traditional and ecological knowledge sharing" \$32,450
- 👉 State NRM Program – "Reconnecting fragmented Malleefowl (*Leipoa ocellata*) habitat near Maya, Western Australia" \$36,325
- 👉 State NRM Program – "Planting feed species for the endangered Carnaby's Black-Cockatoo (*Calyptrorhynchus latirostris*) in the Northern Swan Coastal Plain Important Bird Area" \$45,000
- 👉 NACC Coastal Devolved Grant – Interpretative signage for the Guilderton estuary \$8,580
- 👉 NACC Coastal Devolved Grant – Exploring the Turquoise coast's rehabilitation projects \$8,225
- 👉 Meat & Livestock Australia - Moora Miling – Whole farm profit of grazing crops \$69,500 (MCC is only the sponsor of this project)

This year the administration, running and staffing of Moore Catchment Council (MCC) was undertaken using MCC funds that have been accumulated over the past 25 years in addition to administration and Project management funds coming out of each project, Shires in the Moore Catchment (MC) Annual contributions, equipment hire, a new fee for service contract work, and a grant from Australian Government GVESHO program (unfortunately this funding has now been cut.)

This year the Committee decided to put out expressions of interest for small grants to schools in the MC for small environmental grants from the Moore Catchment Environmental fund. This was taken up by two schools for small projects.

MCC continues to look for sponsorship and grants wherever possible. Donations made to Moore Catchment Council Inc. are tax deductible - DRG - "We are the Service Provider"

Thank you to Rachel for all your hard work throughout the year, all that grant writing and managing of the numerous different small/medium projects that MCC has undertaken this year and Julia for her work until August when her Internship was completed.

Thanking all the Committee and staff for all their efforts and support during the past year.

Helen Watkins – Executive Officer



5 Financial Report:

MOORE CATCHMENT COUNCIL INC. **Compilation Report to MOORE CATCHMENT COUNCIL INC.**

We have compiled the accompanying special purpose financial statements of MOORE CATCHMENT COUNCIL INC., which comprise the Statement of Profit or Loss and Other Comprehensive Income, Statement of Changes in Equity, Statement of Cash Flows and Statement of Financial Position as at 30 June 2014, a summary of significant accounting policies and other explanatory notes. The specific purpose for which the special purpose financial statements have been prepared is set out in Note 1 to the financial statements.

The Responsibility of the Director of MOORE CATCHMENT COUNCIL INC.

The director of MOORE CATCHMENT COUNCIL INC. is solely responsible for the information contained in the special purpose financial statements and has determined that the significant accounting policies adopted as set out in Note 1 to the financial statements are appropriate to meet the director's needs and for the purpose that the financial statements were prepared.

Our Responsibility

On the basis of the information provided by the director of MOORE CATCHMENT COUNCIL INC., we have compiled the accompanying special purpose financial statements in accordance with the significant accounting policies adopted as set out in Note 1 to the financial statements and APES 315: Compilation of Financial Information.

Our procedures use accounting expertise to collect, classify and summarise the financial information, which the director provided, in compiling the financial statements. Our procedures do not include verification or validation procedures. No audit or review has been performed and accordingly no assurance is expressed.

The special purpose financial statements were compiled exclusively for the benefit of the director of MOORE CATCHMENT COUNCIL INC.. We do not accept responsibility to any other person for the contents of the special purpose financial statements.



NORTH MIDLANDS ACCOUNTING SERVICE
PRACTISING ACCOUNTANTS
CARNAMAH WA

16 September, 2014



MOORE CATCHMENT COUNCIL INC.
Detailed Balance Sheet as at 30 June 2014

	Note	2014	2013
		\$	\$
Current Assets			
Cash Assets			
Cash at bank - Westpac A/C 145544		16,302	65,967
Cash at bank - Westpac A/C 145579		15	10
Westpac Term Deposit A/C 148294		61,731	59,973
Westpac Business Reserve A/C 149203		157,390	148,445
Westpac Enfirofund Reserve A/C 158011		5,721	6,623
Cash on hand		86	80
		241,245	281,099
Receivables			
Trade debtors		55,450	45,000
		55,450	45,000
Total Current Assets		296,695	326,099
Total Assets		296,695	326,099
Current Liabilities			
Payables			
Unsecured:			
Trade creditors		35,458	7,182
		35,458	7,182
Current Tax Liabilities			
GST clearing		357	12,905
Amounts withheld from salary and wages		1,020	2,108
		1,377	15,013
Total Current Liabilities		36,835	22,195



MOORE CATCHMENT COUNCIL INC.
Detailed Profit and Loss Statement
For the year ended 30 June 2014

	2014	2013
	\$	\$
Income		
Grants Received	59,205	286,417
GVESHO Funding	4,000	2,500
Interest received	5,961	7,244
Membership Fees	3,500	3,000
Equipment Hire	750	173
Project Income	123,269	573
Project Management Income	28,751	34,080
Refunds	2,476	
Publication Income		2,303
Total income	<u>227,913</u>	<u>336,289</u>
Expenses		
Advertising and promotion	138	583
Audit fees	1,502	2,166
Bank Fees And Charges	170	185
Catering - Meetings	2,681	2,580
Enviro Small Grants	950	
Futures workshop		4,310
Hire - Meetings	464	405
Incidentals	119	15
Insurance	2,753	2,600
Insurance - Workers Compensation		631
Internet Fees	943	503
License Fees	(23)	61
M/V commercial - Lease	4,580	4,094
M/V commercial - Repairs	2,642	4,808
Office Supplies	3,278	770
Office Rental	4,654	4,534
Postage	749	938
Printing & stationery	205	660
Project Management Expenses	29,439	34,080
Consultants	7,273	15,680
Fencing Materials	38,756	8,798



MOORE CATCHMENT COUNCIL INC.
Detailed Profit and Loss Statement
For the year ended 30 June 2014

	2014 \$	2013 \$
Field Days	7,300	934
Printing	1,532	4,757
Seeds & Seedlings	34,500	22,170
Travel Expenses	2,166	2,256
Equipment Purchase		2,085
Planting Costs		10,000
Signage	6,188	
Reimbursements - Fees	4,400	
Repairs & maintenance	190	
Staff training	1,145	667
Staff Uniforms	210	
Superannuation	6,839	9,752
Telephone	2,854	2,809
Teleconference	172	170
Wages	73,530	117,332
Wages - Finance Contract	23,400	21,840
Total expenses	<u>265,700</u>	<u>283,176</u>
Profit (Loss) from Ordinary Activities before income tax	<u><u>(37,787)</u></u>	<u><u>53,114</u></u>



6 Auditors Report:

N

NORTH MIDLANDS
ACCOUNTING SERVICE

MOORE CATCHMENT COUNCIL INC

*Practising Accountants &
Tax Agents*

INDEPENDENT AUDITOR'S REPORT

M

TO THE MEMBERS OF THE MOORE CATCHMENT COUNCIL INC

A

We have audited the Income and Expenditure Books of Account of the MOORE CATCHMENT COUNCIL INC for the year ended 30TH June 2014. The Executives are responsible for the preparation and presentation of the financial report and the information contained therein. We have conducted an independent audit of the financial report in order to express an opinion on it to the members.

S

Our audit has been conducted in accordance with Australian Auditing Standards to provide reasonable assurances as to whether the accounts are free from material misstatement. Our procedures included examination on a test basis, of evidence supporting the amounts and other disclosures in the accounts, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion whether, in all material respects the accounts are presented fairly in accordance with Australian Accounting Concepts and Standards so as to present a view of the MOORE CATCHMENT COUNCIL INC which is consistent with our understanding of its financial position and the results of its operation.

The audit opinion expressed in this report has been formed on the above basis.

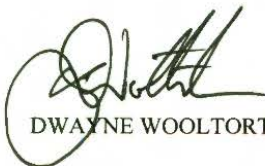
Qualification

Due to the nature of the activities of the MOORE CATCHMENT COUNCIL INC we are unable to verify that all income has been brought to account. Our testing of income has been restricted to the amounts recorded in the books of account, but reflects a true and correct record.

Audit Opinion

In our opinion subject to the above qualification the financial accounts present fairly the financial position of the MOORE CATCHMENT COUNCIL INC for the year ended 30 June 2014 and the results of its operations for the period then ended in accordance with applicable Statements of Accounting Concepts and applicable Accounting Standards.

NORTH MIDLANDS ACCOUNTING SERVICE



DWAYNE WOOLTORTON MIPA

21 MacPherson Street, Carnamah WA 6517 ■ PO Box 110, Carnamah WA 6517
Telephone: (08) 9951 1044 ■ Facsimile: (08) 9951 1227
■ Email: dwaynew@westnet.com.au ■ nmas@westnet.com.au
BIGCHANGE PTY LTD ■ ACN 104 484 040 ■ ABN 38 906 867 264

7 Projects:

7.1 **Grant to Volunteer Environment, Sustainable and Heritage Organisations**

GVESHO funding \$4,000 Project Assist with Admin Time frame June 2013 – July 2014

Moore Catchment Council (MCC) has been successful in being awarded a single year grant of \$4,000 under the 2013-14 funding round for the Grants to Voluntary Environment, Sustainability and Heritage Organisations (GVESHO) program to assist with the everyday Finance/Administration wages and the increased cost of having to insure the organisation for Volunteers and Committee/Directors Insurance. Being able to retain the services of an Executive Officer who is focussed on the administration/promotion of all projects frees MCC's Natural Resource Management Officers to utilise their time entirely engaged with facilitation of the project on the land, significantly improving outcomes for the project and reinforcing MCC's public representation.

7.2 **Demonstrating elite fodder shrubs for future productive use in the NAR**

CFOC funding \$13,400 Project CAG11-00129 Time frame December 2011 – August 2013

The MCC's CFOC Community Action Grant 'Demonstrating elite fodder shrubs for future productive use in the NAR' has concluded but monitoring will be ongoing. This elite Oldman saltbush project funded through Future Farm Industries CRC and partnering Moora-Miling Pasture Improvement Group, aims to find a strain of oldman saltbush with better digestibility and palatability. This project ran alongside a NACC funded site in Miling that concluded the previous financial year. Promotional material including an information banner and handout were produced, and a workshop held in September 2012.

Hayley Norman, project leader of CSIRO provided this report on the demonstration sites findings.

Background

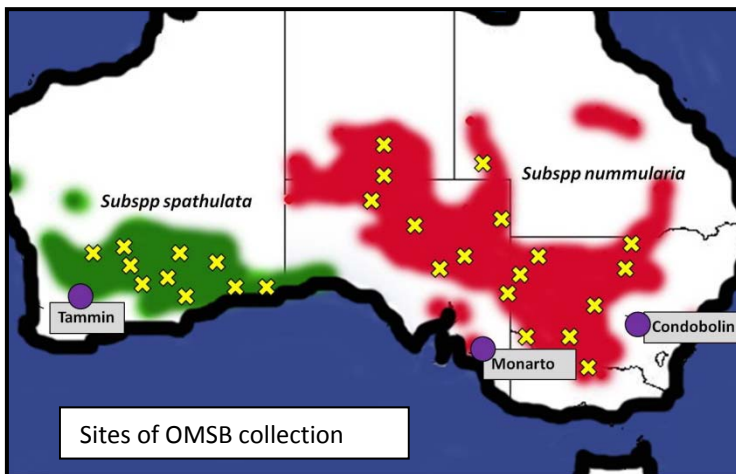
The old man saltbush (OMSB) project was initiated in 2001 when scientists from the CRC Future Farm Industries initiated a collection of old man saltbush seeds from native stands across Australia. The aim of the research programme was to identify OMSB plants with;

1. higher digestibility of the organic matter (energy value),
2. improved palatability to livestock,
3. greater biomass production.

Why did we prioritise these traits? MIDAS whole farm economic modelling, based on the WA central wheatbelt model, indicated that a 10% increase in digestibility of saltbush can lead to a doubling of profitability from the OMSB enterprise. The model also indicated that improving digestibility by 10% would be three times more profitable than increasing biomass production by 10% or reducing the cost of establishment by 10% (M. O'Connell). Producers in NSW indicated that they would like to see an



increase in the relative palatability of OMSB to reduce the likelihood of overgrazing of the understorey while animals 'learnt' to eat saltbush. This made sense as a rapid inclusion of saltbush could reduce liveweight loss during dietary transition.



Assembling the plant collection

OMSB is native to the dry areas of Australia. This means it's already well adapted to drought. The distributions of the two major subspecies of OMSB are shown on the map. Seeds were collected from 27 populations (shown as crosses on the map).

Stage 1 experiments

In this first stage of the project, ~60 000 shrubs were 3 nursery sites in SA (Monarto), NSW (Condobolin) and WA (Tammin). These were assessed for agronomic traits such as survival and biomass growth and the nurseries were grazed with sheep to determine relative palatability and recovery from grazing. A full suite of nutritive value measurements were conducted on a representative subset of plants. To our surprise, sheep grazing the 3 sites showed very similar likes and dislikes amongst the shrubs, indicating preference was not random. We also found significant variation in digestibility, salt content, protein and growth.

Stage 2 experiments

From this first stage, 90 of the 60 000 shrubs (30 from each nursery site) were selected and vegetatively cloned by cuttings (to ensure genetic purity). These were planted in second stage research trials in WA, NSW and SA. When compared to the average of the stage 1 nurseries, these 'elite lines' had 20% higher digestibility, were consistently preferred and produced 8 times more biomass.

Stage 3

In 2011 we selected the best 12 genotypes and planted them at 13 sites across southern Australia in August/September 2012. The sites in WA ranged from Latham in the north to Cranbrook in the south. Soil conditions include deep white sands through to saline grey and red clays. In the east we had sites in the western Murray (NSW) as well as Raukkan (SA). We have initial productivity data and plants at each site have been sub sampled for nutritional value assessment. Testing sites are listed in Table 1.



Watheroo Site



Aaron Edmonds & CSIRO at Calingiri Site

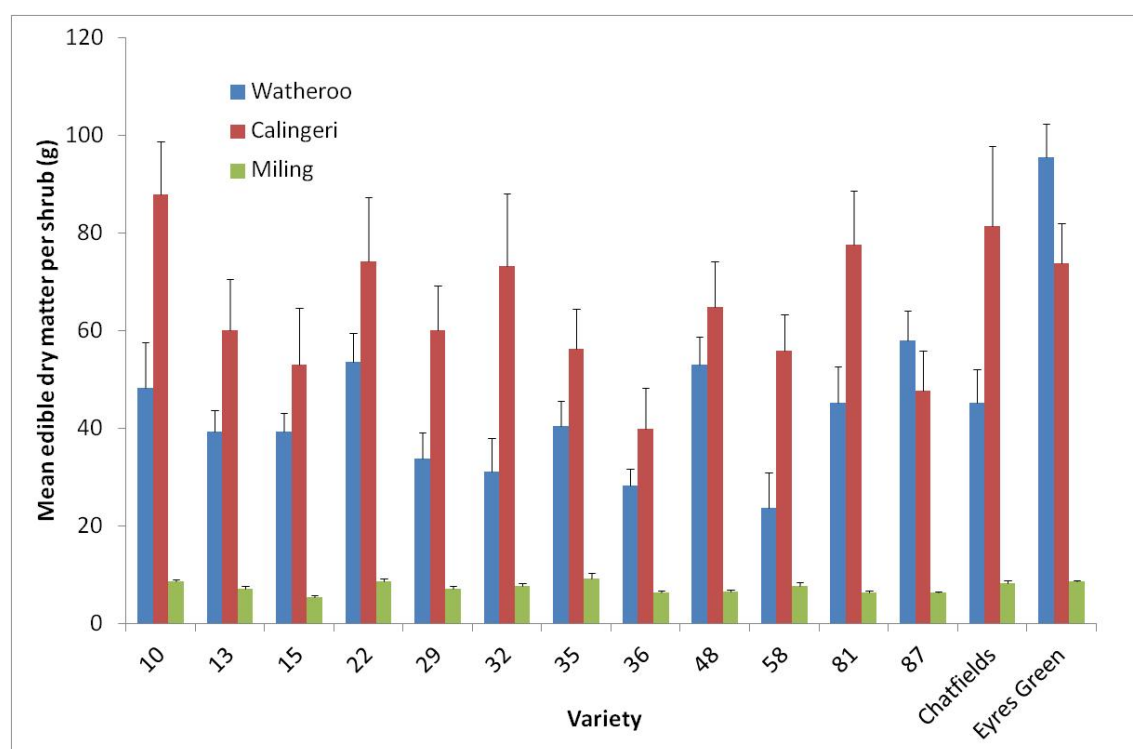


Table 1. Location of clonal testing sites, established in 2012.

Site #	State	Location	Planted	Av. Annual rainfall (mm)	Producer/industry group
1	NSW	Swan Hill	5/06/12	350	
2	WA	Watheroo	7/08/12	420	Moora-Miling Pasture Imp. Group
3	WA	Kellerberrin	5/07/12	325	Kellerberrin LCDC
4	WA	Tammin	4/07/12	330	Tammin Shire Council
5	WA	Bromehill	24/07/12	480	Katanning Landcare
6	WA	Cranbrook	25/07/12	510	Gillimii Group
7	WA	Miling	7/08/12	350	Moora-Miling Pasture Imp. Group
8	WA	Yealering	20/08/12	370	CRC FFI SaltCap
9	WA	Calingiri	8/08/12	450	Moora-Miling Pasture Imp. Group
10	WA	West Arthur	17/08/12	650	Southern Dirt
11	WA	Latham	9/08/12	305	Yarra Yarra Catchment Group
12	SA	Raukkan	8/8/12	470	Raukkan Indigenous Community
13	SA	Lameroo	1/9/12	330	Caring for Country

Preliminary data from the Midlands sites

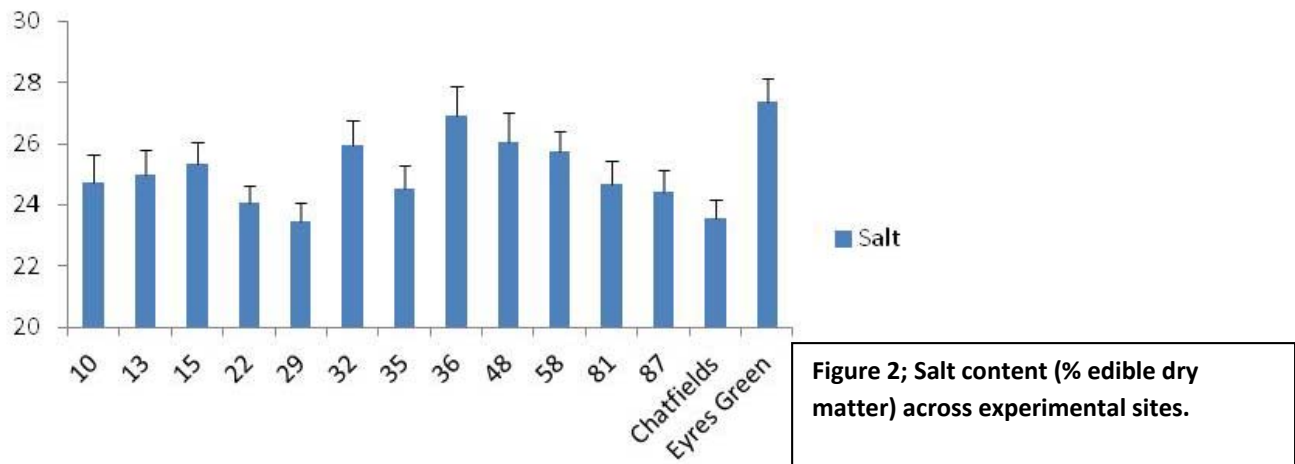
At the Calingiri site 2.5% of plants failed to establish, in the most saline part of the paddock. A further 7% had a fatal run-in with the header during harvest! At the deep white sandy site in Watheroo, 6.8% did not survive – it is unclear if this was associated with drought or predation with evidence of grazing by cattle. While the plants at the saline and waterlogged Miling site failed to grow much biomass, survival was 99%. Biomass was measured at the sites on 13-14 March 2013, approximately 220 days after planting. During the establishment phase, individual shrubs at Calingiri grew an average of 65 g of leaf dry matter (DM). Plants at Watheroo grew 45 g of leaf DM and the plants at Miling grew an average of 8 g of leaf DM. These levels of growth were much lower than the southern sites where there was much higher summer rainfall and plants grew over half a kilogram of edible dry matter per plant during this establishment phase. Biomass growth is presented in Figure 1. The most productive clones



were #10, #13, #22 #32 and #81. The plants from Chatfields Tree Nursery and Eyres green Gian were as p[productive as the selected clones. It is important to note that early growth is often not be correlated to growth after grazing. Obviously long-term productivity and survival is critical.

Figure 1; Biomass data from the Midlands sites.

While biomass is important, the clones were selected primarily on the basis of nutritive value and relative palatability to sheep. A total of 225 plants per site have been subsampled for measurement of nutritional traits. These analyses are continuing however salt and crude protein content is presented in figures 2 and 3.



Calingiri March 2013



Watheroo March 2013

Photos: H Noman

Amount Received as at 30 th June 2014	\$13,400.00
Amount expended as at 30 th June 2014	\$13,400.00
Balance of funds in project as at 30 th June 2014	\$0.00



7.3 **Planting feed species for Carnaby's Black-Cockatoo in the Moora and Koobabbie Important Bird Areas.**

State NRM funding \$45,000 Project 12082 Time frame December 2012 – December 2013

The iconic Carnaby's Black Cockatoo has been a primary focus of MCC's activities in 2013/14. Through State NRM Office funding, the project aims to reintroduce forage and nesting species around the Moora town site and Koobabbie Farm near Coorow, to enhance the breeding prospects of this rare and endangered species. The Moora and Koobabbie Important Bird Areas (IBAs) support up to 60 and 32 breeding pairs of Carnaby's Black-Cockatoo, respectively. The project has been a great success with a well attended Carnaby awareness workshop being held in July, two community planting days plus a school planting day held in late July/early August, 4km of fencing being installed, and the planting of over 17,000 trees and shrubs over fourteen properties and Shire land in the target areas.

The plants chosen for revegetation included *Grevillea petrophiloides* – Pink Poker, *Hakea lissocarpha* – Honey bush, *Hakea scoparia* – Kangaroo bush, *Hakea trifurcata* – Two leafed Hakea, *Hakea preissii* Needle Tree, *Eucalyptus salmonophylla* – Salmon Gum, *Eucalyptus wandoo* – Wandoo, *Eucalyptus loxophleba* – York Gum and *Acacia saligna* Golden Wreath Wattle. MCC joined forces with the Shire of Moora to plant an additional 4,000 local provenance plants on top of the 13,000 ordered through the initial project which included various *Melaleucas* and *Acacias*. All these plants represent a good mix of native Carnaby feed/nesting species suitable for the target areas.

MCC worked with the Shire of Moora and Don Williams to find suitable community planting locations around Moora. Sites identified included behind the hospital adjacent to the Moore River, Candy's Bush Reserve, and west of town along the River and in the Shire depot.



Georgia & Fiona Falconer planted Carnaby's Forage plants



Carnaby's information day

Ever seen a Carnaby Black Cockatoo up close? The opportunity arose to get up close and personal with Chasey the Carnaby at an informative workshop held in Moora on the 16th July to raise awareness of this endangered bird species. The workshop was funded through MCC's State NRM Office Carnaby's Black Cockatoo forage habitat project. The day attracted more than twenty-five people from all over the region and the Perth area.

The day kicked off with Wally Kerkhoff of the Kerkhoff Carnaby Group, who talked about his work in Moora over the years with rehabilitating Carnaby's which have been injured or poisoned. Wally is passionately dedicated to preserving the bird species and shared some of his observations into conserving them including using Afgan melons as feed (they love the seeds). One audience member was so touched by Wally's cause that a sizable donation to his fund was made!



Wally was finally upstaged by Chasey the Carnaby who was nosily munching marri nuts. Paula and Kylie from Kaarakin Black-Cockatoo Conservation Centre brought him up to show the audience how magnificent the endangered bird species is up close, and to demonstrate what the Centre does for injured Carnaby's in the Swan Hills. Chasey was the highlight of the day for many and wasn't shy for the camera.

Sarah Mason, a farmer from Calingiri and a keen Carnaby enthusiast, gave a farmers perspective of protecting the Carnaby and native vegetation on her farm through fencing, and connecting existing remnant native vegetation through revegetation corridors. Sarah and her husband Geoff have planted many hectares of native plants throughout their farm providing much needed feed and nesting habitat for Carnaby's.



Chasey the Carnaby

After a delicious lunch, the group headed out to Wally's house to look at where he cares for the Carnaby's plus look at his nesting 'logs' which he makes for artificial nests. Wally has made dozens of these which are erected around Moora (and beyond) and have been very successful at attracting breeding pairs to lay eggs and raise young chicks. On leaving, Wally gave everyone some of his homemade honey - bonus !

The group then moved on to Candy's Bush Reserve to have a guided walk with Jenny Borger from WWF. This was unfortunately cut short by a torrential downpour! But we can't complain about the much needed rain.

Thanks to all the speakers and participants who made the day a success.

Planting days

The MCC organised two community plantings day on the 25th and 28th July in Moora as a part of the Carnaby's project. The Shire of Moora allocated a number of sites around Moora that MCC could use and also provided an extra 4,000+ native tree seedlings grown at CY O'Connor Institute with seed collected by local farmer and ecologist Don Williams.

Nearly twenty people volunteered over the two days including Moora residents, CY O'Connor students and volunteers from Perth. The total planted was approximately 2,000 seedlings.

The project also paid for a contractor to rip and mound the sites which, along with the fabulous rains straight after planting, will ensure a good establishment.

The MCC, in conjunction with the Shire of Moora, also organised a school tree planting with St. Joes Primary school on 1st August behind the Moora hospital. The children were super enthusiast and got to work immediately by separating into planting teams. Over the hour, they managed to plant approximately 800 plants. Great job!

Thanks to Don Williams for helping out.



St Joseph's planting Day



Fencing

As part of the State NRM funded Carnaby's project, MCC have been able to carry out some revegetation of bare areas within Candy's Bush reserve in Moora and allow fencing to be funded to protect this vegetation and the rest of the reserve from degradation from motorbikes and cars. This is Stage 1 of a multi stage project to conserve Candy's Bush Reserve for the future. Action was decided after a gathering of relevant stakeholders met at the reserve in mid June 2013 which included the Shire, Friends of the Moora Woodlands, Yued Group, SWALSC, and MCC. Here, possible plans and issues were discussed and logistics of where fencing could go. On confirmation of the plan of action, the MCC have assisted the Friends of the Moora Woodlands and Yued Group to instigate the on-ground works.

MCC has since obtained additional funding through the State NRM program to create interpretative signage and formalise a walking trail through the reserve.

MCC teamed up with Friends of the Moora Woodlands (FoMW) to organise and run a fencing busy bee weekend (30th Aug - 1st Sep). Thanks to the Shire of Moora for delivering some of the materials needed from Perth. Nearly a dozen volunteers came and helped over the weekend armed with hammers and shovels. Jim Pond, FoMW Chairman, was elected project team leader and delegated jobs to the workers. This involved erecting the wooden fence posts and rails, stringing wire between posts, installing metal fence posts, and fixing wire to the posts.

On Saturday, volunteers worked from 9am until half 1pm and followed up with an additional three hours on Sunday. Hungry workers were rewarded with a sausage sizzle. The volunteers managed to install 400m of fence adjacent to Gardiner St and the remainder fenced using a contractor.



Friends of the Moora Woodlands Volunteers. Photo: M. Carter

Amount Received as at 30 th June 2014	\$45,000.00
Amount expended as at 30 th June 2014	\$45,000.00
Balance of funds in project as at 30 th June 2014	\$0.00



7.4 “Demonstrating different establishment techniques of perennials in deep sand

Community Landcare Grants funding \$10,900 Project CLG-1206222-828 Time frame June 1013 – March 2015

Ian McGillivray is a Koojan farmer who likes to get the best from all his land - even his poor gutless sands. Establishing perennial plants in deep white non-wetting sands is problematic. This is due to poor water and nutrient holding capacity of the soil at the root zone, and ensuring the plants survive their first summer in the NAR before accessing subsurface moisture.

Back in March 2013 Ian scribbled his idea on the back of an envelope for a trial to better establish fodder shrubs on his poor sands using a variety of proven soil amelioration techniques. He then visited Moore Catchment Council who submitted his project idea through the Federal Caring For Our Country Community Landcare grants program and was successful in obtaining \$10,900 to demonstrate his trial.

Ian is also a great planner and decided to have a mini trial of his main trial in 2013 to pre-test some of his ideas. With pre-trial knowledge gained, Ian got to work setting up a 47 run trial plot in 2014 which has involved different scenarios of chicken manure, organic soil conditioner, clay and Agflow. All trial runs have been ripped to 350mm and 600mm before spading in the different ameliorants. Ian has a preference for fodder shrubs and has planted 6,000 saltbush (River and Oldman) and Tagasaste as part of the trial.

On inspection in late July with Ian and Phil Barrett-Lennard (Agvivo), it was interesting to see the difference in the subsurface condition of ameliorated soils as compared to the poor water capacity of the normal sand. It was also already clear to see that some of the scenarios involving high rates of chicken manure were causing the seedlings to stress.

The trial will be reinspected after the summer and a field walk held for other farmers to view the trial and see result



Ian (Right) explains ripping depth to Phil Barrett-Lennard

Amount Received as at 30 th June 2014	\$10,900.00
Amount expended as at 30 th June 2014	\$ 1,400.00
Balance of funds in project as at 30 th June 2014	\$ 9,500.00



7.5 North Guilderton Restoration Project

NACC funding \$55,000 Project 4-8N13-01-01 Time frame June 2013 – December 2014

The North Guilderton Coastal Restoration Stage 1 project is completed and has resulted in a 22ha patch of dunes North of Guilderton being protected from vehicles and creation of the Djena Koorl-iny walk trail.

This project was delivered by MCC and funded by NACC through the Federal Government, and involved multi stakeholder liaison to plan and install fencing and signage to encourage dune vehicle users to stick to the designated tracks. The project aims to improve the management of uncontrolled four wheel drive access, which is damaging the north



Guilderton dunes and their unique coastal vegetation. The project also involved creating a walk trail with interpretative signage for locals and visitors to enjoy.

A stakeholder meeting was held 14th August in Guilderton to discuss the finer points of the plan. Stakeholders present included representatives from the Guilderton Community Association, Shire

of Gingin, Department of Parks & Wildlife, South West Aboriginal Land & Sea Council, Moore Catchment Council, and the Northern Agricultural Catchments Council. Outcomes included a slightly revised plan that moves on-ground works and track alignment from Unallocated Crown Land (UCL) to designated Road Reserve. The revised plan was presented to the Shire of Gingin and Yued Working Party in November and given the go ahead.



MCC designed the signage for both the fencing and the walk trail and on-ground works started in autumn 2014. Heavy duty cable fencing, a gate and all signage has been installed by Department of Parks and Wildlife.



The Djena Koorl-iny (meaning 'go on foot' in Noongar language) walk trail is a 1.6km trail through the dunes and return by the beach. Interpretative signage explains dune flora and traditional Yued values. Further funding has been applied for to revegetate the degraded tracks within the protected area and remove weeds. The Shire of Gingin has also just confirmed funding for some track stabilisation using crushed limestone and native brushing.

Amount Received as at 30 th June 2014	\$55,000.00
Amount expended as at 30 th June 2014	\$42,005.25
Balance of funds in project as at 30 th June 2014	\$12,994.75



7.6 Conservation of Candy's Bush Reserve through Traditional & Ecological knowledge sharing

State NRM Program funding \$32,450.00 Project 13002 Time frame February 2014 – June 2015

Candy's Bush Reserve in Moora now has Land For Wildlife status. This is an accolade that Department of Parks & Wildlife awards to pockets of worthy remnant vegetation which show good quality habitat for native fauna. Fiona Falconer, Land For Wildlife Officer came and did the official assessment in June. This was carried out as part of the latest MCC State NRM Program project to protect and promote Candy's Bush Reserve as a local natural asset. Since fencing off the reserve in 2013, many of the degraded areas have started to cover over already which is great news. Some spraying of the SourSob weed has



Fiona Falconer awards Candy's Reserve Land for Wildlife status

also taken place this year to help control it spreading.



(*Caladenia longicauda*) - White Spider Orchid

The flora in the reserve has really sprung to life this year giving fantastic displays of orchids as well as *Hakea lissocarpha* (honeybush), carpets of daisies and the purple fringed lily; plus a possible sighting of a new population of a Declared Rare Flora (DRF). The two Carnaby's Black Cockatoo artificial nesting hollows have also been successful in attracting a couple of breeding pairs, which is good news in helping with state-wide Carnaby's survival.

A formalised 1km walk trail has been developed around the reserve as part of the project. Information signage including flora identification, bush medicine plants, reserve history and Carnaby's Black Cockatoo awareness is being developed in conjunction with the Friends of the Moora Woodlands and Yued community. Signage will be placed at the car park on Gardiner St and dotted along the walk trail. New picnic tables and benches will also be placed in the reserve donated by the Shire.



Salmon Gums in Candy's reserve

Amount Received as at 30 th June 2014	\$32,450.00
Amount expended as at 30 th June 2014	\$ 2,028.68
Balance of funds in project as at 30 th June 2014	\$30,421.32



7.7 **Planting feed species for the endangered Carnaby's Black-Cockatoo (*Calyptorhynchus latirostirs*) in the Northern Swan Coastal Plain Important Bird Area**

State NRM Program funding \$54,000.00 Project 13003 Time frame February 2014 – June 2015

There has been amazing uptake for the Moore Catchment Council's 'Plant feed species for Carnaby's Black Cockatoo project', funded through the State NRM Program. This project aims to increase the native forage habitat in the Swan Sandplain Important Bird Area. Carnaby's are a South West WA endemic but endangered species with population estimates as low as 11,000. Projects like these are urgently needed to conserve this bird species.

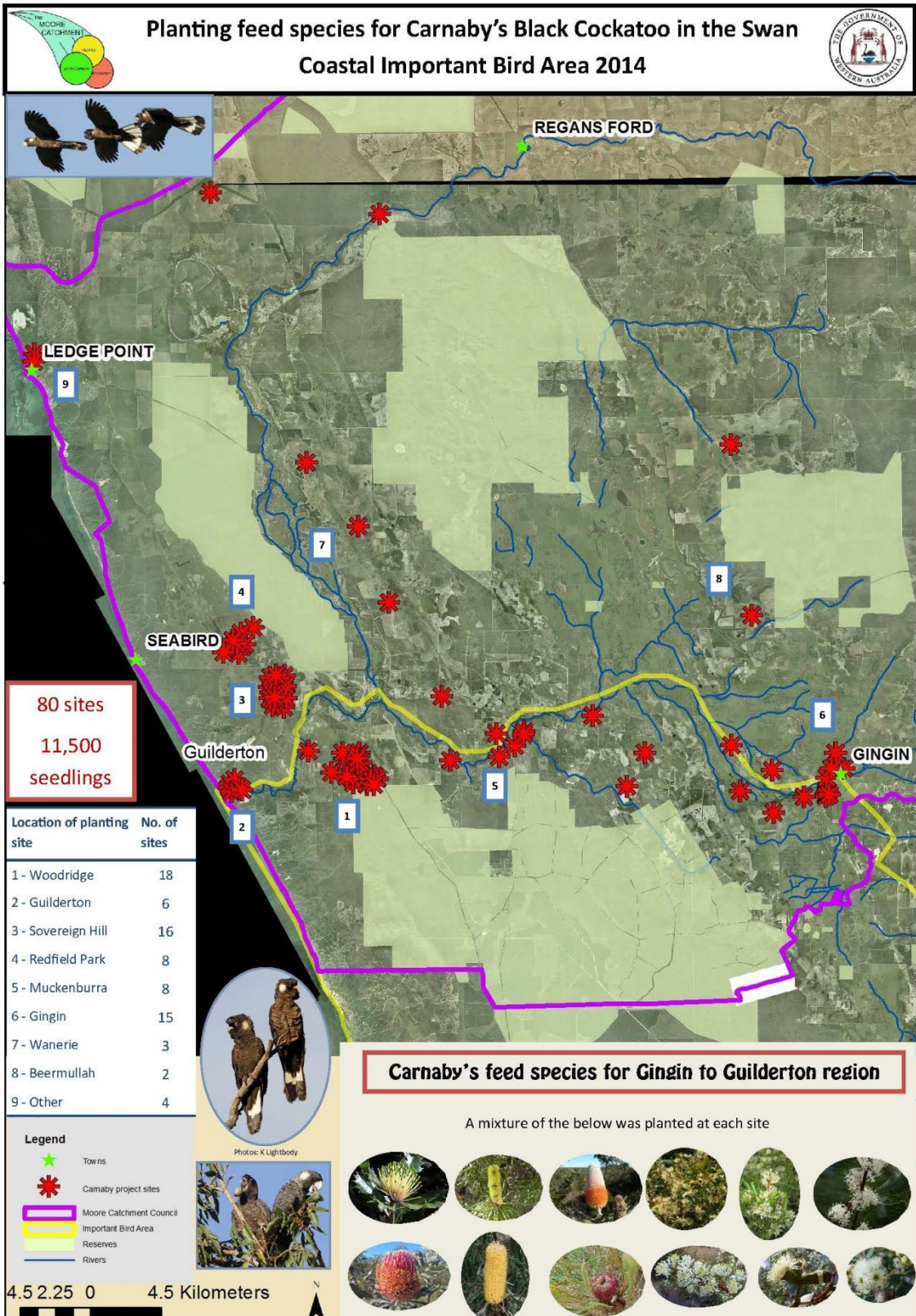
80 local landholders and community groups have been involved with planting native Banksia, Hakea and Eucalypt species between Gingin and Guilderton. There has been huge interest from private landholders in Woodridge and Sovereign Hill as well as the Guilderton Golf club and Gardening club. Plants and information were also given away to 55 local landholders at the Women Wine and Wellbeing event in Dandaragan in July, and more will be given away at the upcoming Moora Agricultural show 20th September. Overall, 12,500 native seedlings will be planted through this project for Carnaby's. An information day on the Carnaby's will be held in Guilderton in October.



Carnaby's Black Cockatoos at Guilderton

Photo: L. Johnson





Amount Received as at 30 th June 2014	\$45,000.00
Amount expended as at 30 th June 2014	\$25,421.06
Balance of funds in project as at 30 th June 2014	\$19,578.94

7.8 Reconnecting fragmented Malleefowl (*Leipoa ocellata*) habitat near Maya, WA

State NRM funding \$36,325.00 Project 13004 Time frame February 2014 – June 2015

Malleefowl have had a welcome boost to their habitat near Maya this year with local landowner Phil Nicolaou rehabilitating thirty hectares of his farm with native species. Moore Catchment Council obtained funds through the State NRM Program to carry out this project to help conserve Malleefowl populations in the area by rehabilitating cleared land with native plants and improving connectivity between remnant vegetation. Malleefowl have got it all against them. This once widespread bird has been reduced to a few pockets in



Rainbow bee eater and zebra finches

WA with the Maya area being one of them. In WA Malleefowl are classed as ‘fauna that is rare or is likely to become extinct’ and their downfall is due to mass clearance of their habitat, predation from foxes and cats and their low ability to adapt to human impact from fires and traffic.



Healthy Allocasuarina seedlings

This project involved partnering with the North Central Malleefowl Preservation Group (NCMPG) and Department of Parks & Wildlife (DPAW) to plan activities. The farm has also been awarded Land for Wildlife status by DPAW for retaining good quality native vegetation through large remnants and connecting corridors.

Phil has been keen to balance productive agriculture on his farm with preserving and rehabilitating native habitat for Malleefowl and other native fauna. Phil, his son and Peter Waterhouse (local farmer and NCMPG member) planted 29,000 mixed local species in June which include Acacias, Melaleucas, Eucalypts and Allocasuarinas. Hopefully survival will be high as Phil and his team have done an excellent job in establishing the seedlings to coincide with the rains.

The projects also donated 1000 seedlings for the recent community planting day in Maya organised by NACC. Next event planned will be a comprehensive assessment of one of Phil’s remnants to look for Malleefowl activity. This will involve local volunteers walking through the bush in a systematic way with GPS logging any Malleefowl mounds or birds. This information will be fed into the National Malleefowl database and help build a better picture of Malleefowl presence in the area.



Peter Waterhouse and Phil Nicolaou check on seedlings

Amount Received as at 30 th June 2014	\$36,325.00
Amount expended as at 30 th June 2014	\$ 3,982.88
Balance of funds in project as at 30 th June 2014	\$32,342.12



7.9 “Interpretative Signage for the Guilderton Estuary”

NACC funding \$8,580.00 Project Coastal Devolved Grants 1415-06-DG07 Time frame January 2014 – June 2014

Moore Catchment Council used a NACC funded grant to design and produce five signs to help explain the Moore estuary’s ecology, Aboriginal significance and natural processes to visitors and locals. Guilderton is an extremely popular tourist spot throughout the year which puts huge pressure on the natural processes of the estuary including artificial opening of the sandbar.

The project involved collaborating with local groups and Departments to decide what information to put on the signs and gather the material needed. Stakeholders have included Shire of Gingin, GCA, Lower Moore River Working Group, Yued Group, SWALSC, and Department of Water. Hopefully the new signage will encourage visitors to respect and want to conserve Guilderton’s the natural assets around the river mouth, and also understand why it’s important to maintain the ecological balance of the estuary by not digging out the sandbar. The new signage will be located at the main estuary car park and the estuary lookout

Protect the Moore River estuary's sandbar

The Moore River estuary's unique environment is influenced by the flows and nutrient loads from the catchment and groundwater, and the sandbar at the mouth of the estuary. If the sandbar is artificially breached and water levels in the estuary are not allowed to build up (especially in summer), the flushing of sediments and nutrients from the estuary is compromised. This can impact the ecology of the estuary, affecting the fish and invertebrates within the water, and the trees and bushes that surround it. **Please let nature control the sandbar.**

Did you know? Water levels in the estuary can vary by two metres. When the sandbar is breached, estuary water levels can drop by one metre in just one hour.

How does the Moore River estuary work?

Sandbar open - high flow
Water rainfall in the catchment brings high flows laden with nutrients, sediments and toxins into the estuary. Flows from the main branch of the Moore River are brackish, carry sediment and are rich in nitrogen, while those from Gingin Brook are fresh, highly coloured with both high nitrogen and phosphorus concentrations. Water levels in the estuary rise and breach the sandbar at the river's mouth. Catchment flows prevent sand accumulation ensuring the mouth stays open and the estuary is flushed. During wet winters the bar can remain open for months, however in dry years it may only stay open for a week at a time.

Sandbar open/closed - low flow
When the bar is open, there is an exchange of fauna, algae, nutrients and water between the marine and estuarine environments. When river flows decrease, the sandbar starts to build up again. The bar can be very unstable, occasionally opening and closing in the same day. Groundwater seeps into the lower rivers and estuary ensuring the lower Moore River and Gingin Brook flow all year. Algal growth occurs in the warm, shallow nutrient rich waters and can become exposed on the beaches when water levels drop. When saline water becomes trapped in the estuary stratification can cause de-oxygenation of the bottom water.

Sandbar closed - low flow
The sand bar is formed by ocean waves pushing up sand at the river mouth when there is low river flow. During the summer the bar can remain closed for several months at a time. Groundwater discharge causes water levels to rise and water temperatures to drop. The coloured estuary water restricts light penetration and limits algal growth, despite available nutrients. The longer the bar remains closed the more effective the first breach will be at flushing the estuary.

When the sandbar is breached it can be a phenomenal sight to see the highly coloured estuary water pushing out and mixing with the clean blue ocean water. On average (2008-2011) the estuary received a total annual flow of 35 GL, 32 GL from the lower Moore River and a further 3.3 GL from Gingin Brook (3 GL = 1 million cubic metres). However, between 1995 and 1999 an annual average flow of 155 GL was observed. The tropical cyclone Elaine resulted in a total annual discharge of 362 GL (1999) and maximum daily discharge of 21 GL (22 March 1999). The flooding caused by the cyclone resulted in water levels in the upper Moore River rising by 4.5 metres (21-22 March) and the resulting plume that surged out of the estuary reaching 15 km north of Guilderton.

Amount Received as at 30 th June 2014	\$8,580.00
Amount expended as at 30 th June 2014	\$3,839.36
Balance of funds in project as at 30 th June 2014	\$4,740.64



7.10 “Exploring the Turquoise Coast’s rehabilitation projects”

NACC funding \$8,225.00 Project Coastal Devolved Grants 1415-06-DG08 Time frame January 2014 – June 2014

Ever wondered what people are doing to conserve the Turquoise coast and how to get involved? This was the theme for Moore Catchment Council’s (MCC) ‘Explore the Turquoise coast’ bus tour on Friday 21st March. The event was funded by the Northern Agricultural Catchments Council (NACC) through the Federal Government, and aimed to network like-minded coast care volunteers and showcase rehabilitation projects between Cervantes and Guilderton.

First stop was Lake Thetis where Charlie Shaw (Yued Elder) gave a traditional ‘Welcome to Country’ followed by Brad Rushforth (Dept of Parks & Wildlife) who explained the ecological significance of the hyper saline lake which contain stromatolites – colonies of cyanobacteria around 3,500 years old. Brad also showed us the boardwalk walk trail project which is helping to protect the stromatolites from being damaged.



Back on the bus, Philippa Schmucker (NACC NRM Officer) talked about NACC coastal projects including one focusing on long term beach photo monitoring, followed by Jan Richards (Ledge Point Coastcare) who gave a potted history of the Coastcare group and projects to date. The next stop was Ledge Point where the group had a guided tour of the Key Biscayne coastal dune rehabilitation project with Jan Richards and Dave Bright (Regen4 Environmental). To help reduce degradation, an 800m stretch of dunes was fenced off, weeded and revegetated in 2010 using a Coastwest grant. Keen Ledge volunteers have continued on with the weeding/revegetating and it’s making a positive impact.

It was a quick hop to the next stop in Guilderton where the Guilderton Community Association (GCA) greeted the group with a wonderful lunch on the banks of the Moore River estuary. After being refreshed, the group was welcomed formally by Gillian Lamont (Chair GCA), and then by Charlie Shaw and members of the Yued who talked about the cultural relevance of Guilderton (or Gabbadah – its original Aboriginal name) and then demonstrated a water ritual to announce the group’s presence to the country and allow safe travel. The Yued ladies threw sand into the river and spoke their names. The group then split into two concurrent sessions. On offer was the highly popular Moore estuary boat cruise run by Phil Cook, a local environmentalist passionate about the protection of the Moore River, or an informative town tour with ‘Secret no longer’ author and long-time resident John Prince. Both trips were well received.





Turquoise coast bus tour participants

Then it was time to leave for the trip back north. To keep everyone entertained, Rachel had devised a quiz about bus trip. Prizes on offer included two framed Guilderton themed photos and a selection of goodies featuring free Moore boat cruise tickets and NACC garden guides. After quizzing the participants with a variety of easy and taxing questions, the highest scorer and overall winner was Shane Love with runner up Jan Richards. Well done to both!

The bus had a quick stop at Hangover Bay to look at the new signage and then continued on to drop off the weary passengers back in their home towns. Huge thanks to everyone that came along and made the day a success including the speakers, the GCA, West Midlands Group for the microphones, and Philippa for all her help. MCC hopes everyone took something useful away from the day to help conserve their patch of the Turquoise coast.



Quiz winners Shane Love and Jan Richards with tour organiser Rachel Walmsley

Amount Received as at 30 th June 2014	\$8,225.00
Amount expended as at 30 th June 2014	\$7,664.86
Balance of funds in project as at 30 th June 2014	\$ 560.14



8 Workshops & Field Days

8.1 MCC Annual General Meetings & Meetings Round Up

MCC AGM and meeting Round Up

Annual General Meeting

MCC held their AGM in Moora on October 4th. Attendance was not high but there were enough people to vote through the constitutional changes which included having less committee members. Previously there have been 16 committee members (2 from each Shire) but this was deemed as far too many. The new constitution states between 7 and 10 committee members.

An interim committee was also elected to attend to the business of the MCC until the new constitution has been approved by Department of Commerce. This committee will call a special meeting in the New Year to elect a new committee under the new guidelines.

After the formalities of the meeting, presentations were given by Shane Love, Moore MP and a director of NACC, and John Holley, director of the State NRM Office. Shane talked about the new programs NACC will be offering, and funding opportunities available to MCC and residents of the Northern Agricultural Region.

John Holley talked about the future of State and Federal NRM funding. The future of NRM groups such as MCC is in jeopardy because funding for the environment has fallen off the agenda of both governments. The knock-on from this will be the lack of on-ground NRM projects happening here in the Moore Catchment and the loss of local experienced NRM officers who help coordinate these projects.

To finish off the day and to highlight the recent Carnaby's project, MCC decided to have a fun quiz! Rachel developed 10 multi choice questions to test the participants on their Carnaby knowledge. Up for grabs for the winner was a framed Carnaby's Black Cockatoo photo taken by renowned local nature photographer Keith Lightbody. Linda Johnson from Guilderton was the winner - congratulations!



Photo: L-R Shane Love MLA, Linda Johnson winner, Helen Watkins holding a framed Carnaby's Black Cockatoo photo taken by renowned local nature photographer Keith Lightbody and John Holley State NRM Office



Special General Meeting

13 members attended the Special General meeting of the Moore Catchment Council held in the Moora Shire Chambers on 21st February to elect the new committee under the new constitution of the Moore Catchment Council.

The aim of the committee is to provide direction for the conservation of the Moore River and its catchment through the services provided by an NRM Officer and an Executive Officer.

The elected committee consists of: Chair Reg Beale, Vice Chair Tony White, Secretary Jennifer Bairstow, Treasurer Lawrie Short, Sarah Mason, John Braid, Kaye Reid and Peter Waterhouse.

Christmas Function

The Staff and Committee held their Annual Christmas wind-up at the park in Gingin on 20th December. A scrumptious meal and an enjoyable day was held by all in this beautiful setting

8.2 **Agricultural Shows**

Agricultural Show displays

MCC had a display at the Moora show in September. This year we gave away 500 seedlings and information as part of the State NRM funded Carnaby's project.



Display with Free Trees at the Moora Show



Interested people looking at the Moore Catchment Council display in the Wool Pavilion at the Moora Show



8.3 Heavenly Hectares Workshop

Heavenly Hectares workshop for small landholders

“How do I manage weeds on my property” and “Where do I get a soil test done” were just two of the many questions asked at the Heavenly Hectares workshop in Gingin on Saturday 23rd November.

The Moore Catchment Council organised the event in partnership with The Forever Project, Avongro and Northern Agricultural Catchments Council with funding through the Federal Caring For Our Country initiative, DAFWA, and The Natural Disaster Resilience Program. Rachel Walmsley of MCC said “Chris Ferreira from The Forever Project is well known on the sustainable living circuit and he delivered an entertaining and fast paced introduction to creating sustainable rural properties. I’ve worked with him before and witnessed his enthusiast style so I knew he wouldn’t disappoint.”

The day was very much an interactive event with participants being encouraged to ask their burning questions. Topics included fire safety – Chris suggests to think of a fire break as more like an emergency fire access track and also to plant fire retardant species, water harvesting – use water where it falls, fertiliser management – use more efficiently, property planning – everyone should get an aerial plan of their property, water and soil testing – get a proper soil/water test done at the worst time of year ie summer, and perennial pastures – get on-farm pasture all year round.

The 3 hour session ended with a giveaway of fertiliser measuring jugs, a dieback kit and 3 copies of The West Australian Garden Guide. Rachel says “Huge thanks to the financial sponsors that made today possible, to everyone who came along, and to Chris for his informative and lively presentation. Everyone went away inspired with new ideas and projects to make their properties more sustainable.”



Photo: L-R Chris Ferreira, Rachel Walmsley, with book winners Peter Rimmer, Helen Harvey and Adriaan du Toit



8.4 State NRM Tipping Point Conference

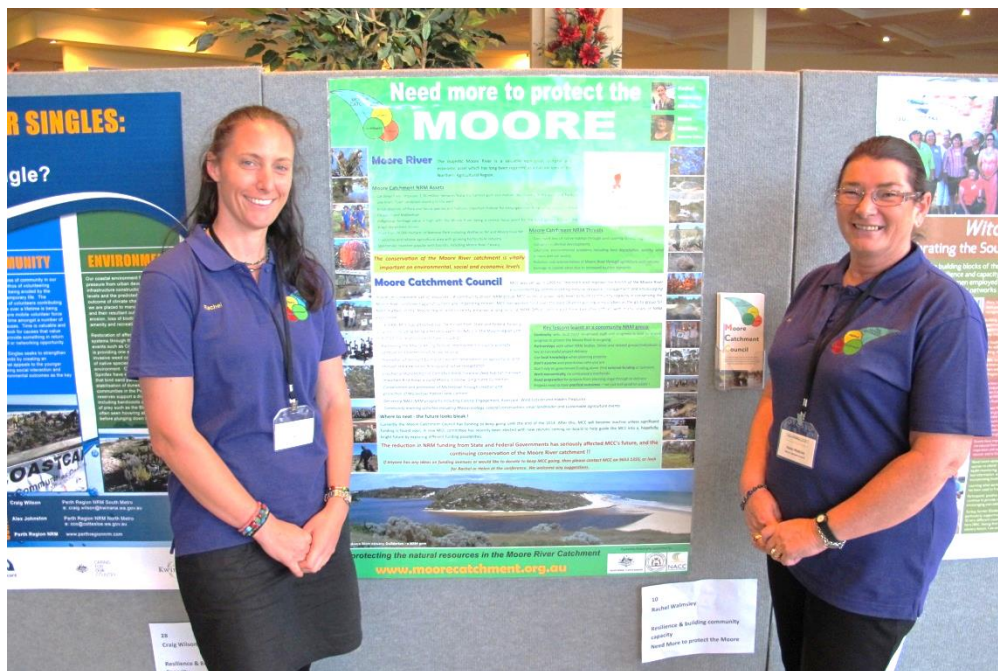
Moore Catchment Display at Tipping Point Conference

Moore Catchment Council's Rachel and Helen had the opportunity to attend the State NRM Conference in Busselton in May thanks to funding through NACC. MCC also designed and submitted a poster to be featured in the poster parade which highlighted the effects that reduced State and Federal funding is having on Moore Catchment Council and its continuing efforts to conserve the Moore River's health.

The conference was entitled the Tipping Point - the little things matter and can make a big difference. Focus was on raising awareness through interesting stories, engaging the public through all mediums, and working from grass roots up. Highlight presentations included Luke Bowen (former NT Cattleman Ass) who discussed the issues surrounding the Live Export debacle, and Peter Stone (CSIRO) who discussed shale fracking - hot topic in WA.

Some good news came from Paul Rosair (Director General Department of Regional Development) who announced NRM funding from Royalties for Regions of \$19.2 million over 3 years from 2015/16. Details of the program are yet to be released and could be too late for Moore Catchment Council who only has funding until the end of the year.

Closing keynote speaker was 84 yr old legend Dr Harry Butler of 'In the Wild' TV fame. He spoke passionately of his involvements in the environment sector over the many years, and also of his views of environmental issues facing us today. He also talked about his project on Barrow Island to remove feral pests and weeds and recover native species. What a career! We salute you Harry on making a difference.



Rachel Walmsley and Helen Watkins at the State NRM conference

9 Moore Catchment Council Activities

9.1 *Railway tree decline*

Railway Tree Decline

Railway bush reserves are highly important both as ecological corridors and as community assets. In Spring 2013, extensive tree decline was noticed along the railway between Wannamal to Geraldton involving York Gums, Salmon Gums and Wandoo. This issue could have huge implications on the biodiversity of this region so MCC were quick to investigate with two stakeholder meetings being organised in January and March 2014.

The initial meeting with Brookfield Rail in January in Moora discussed the issue and the community's concerns on why thousands of trees along the railway suddenly becoming sick in Spring 2013. Outcomes included leaf/soil sampling of affected areas and further investigation by Brookfield Rail.

A follow up meeting was held in March in Moora between Brookfield Rail and even more concerned stakeholders than the first meeting. Leaf/soil samples results concluded that the residual herbicide chemical Metribuzin is to blame for the tree decline. This has been used by Brookfield Rail with Glyphosate to control weeds including resistant rye grass, and had been used for the previous two years prior to 2013 without ill effects. It is thought the rain events/wet spring may have unfortunately allowed the chemical to infiltrate the soil and reach the tree roots. The long dry summer has also not helped with tree recovery.



Nutrient Injections

Lengthy discussions were held on Brookfield Rail's weed spraying protocol including chemicals used, technique and timing. Brookfield Rail said they are reviewing their procedures and that Metribuzin would not be used again on the line. Chemical selection is made in conjunction with the Australian Glyphosate Sustainability Working Group to avoid weed species developing glyphosate resistance. Actions to be taken by Brookfield Rail include using a proven nutrient injection technique to bring back a number of prominent sick trees including those through Moora and Coomberdale. This happened in April with 180 trees being injected. Monitoring by Brookfield Rail will be long term to gauge success. Recovery of a large number of trees is expected over the autumn/winter but this will be reviewed in the spring. Brookfield Rail will also commit to a wide scale planting program if necessary.

This will be discussed at the next meeting in the spring. MCC thanks Brookfield Rail for being open and honest as this has helped get this issue dealt with in a prompt manner.



Affected leaves



9.2 **Moore Catchment Environmental Fund**

Moore Catchment Environmental fund funding \$950.00 Project 2014-01-MCEF & 2014-02-MCEF Time frame June 2014 – December 2014

This year the Moore Catchment Environmental fund undertook to offer to Schools within the Moore Catchment a small grant to encourage the teaching of environmental awareness in schools.

Two schools took up the opportunity to use this funding -
St Joseph's School Moora "A Veggie Garden for Kindy:
\$450.00

Central Midlands Senior High School "Central Midlands
Sustainable Community Backyard" \$500.00

These grants are to be completed by the end of the
School year.



St Joseph's school Proposed Veggie
Garden design

9.3 **MCC Grant Applications**

MCC Grant Applications

Meat & Livestock Australia Limited – B.FDP.0030 - Successful

Moora Miling – Whole farm profit of grazing crops

(Moore Catchment Council is the Sponsor Organisation on this project)

An evaluation of the benefits to sheep production systems of using crops as a feed source will take place in the Moora region of Western Australia. This will occur through examining the value of time taken in sowing the crop, the benefits to pasture growth of deferring grazing and the yield penalties incurred as a result of grazing the crops.

This project forms part of MLAs Producer Research Site program that is part of the southern Feedbase Investment Plan. In particular, this project supports the MLA-funded project B.GSM.0008 – Step changes in meat production systems from dual-purpose crops in the feedbase.

Funding = \$69,500.00

NACC – Eol to undertake Demonstration of Innovative Practices Round One – Successful

Demonstration of NyPa Forage to stabilise saline land

NyPa Forage (*Distichlis spicata* var. *yensen-4a*) is a perennial salt loving forage grass that is the result of 20 years of selections from the native American grass. The NyPa plants have an exceptional capacity to move salt out of the water it takes up in respiration, this is due to its deep root structure and its very efficient salt gland. Benefits of NyPa include

1) Produces palatable green forage on saline discharge sites throughout the summer months,



- 2) Helps stabilize the soil, helping to prevent further degradation such as erosion and salt spread and
- 3) Has been shown to improve the soil chemical and physical properties including through the bio-sequestration of carbon

Funding = \$20,460.00

State NRM Program – Pending

Project 1

“Further demonstration of NyPa Forage to stabilise saline land”

This project will establish 25 ha of NyPa Forage on 5 neighbouring farms in Gillingarra. The NyPa plants have an exceptional capacity to move salt out of the water it takes up in respiration, this is due to its deep root structure and it's very efficient salt gland. Benefits include 1) Produces palatable green forage on saline discharge sites throughout the summer months, 2) Helps stabilize the soil, helping to prevent further degradation such as erosion and salt spread and 3) Has been shown to improve the soil chemical and physical properties including through the bio-sequestration of carbon.

Funding Requested = \$50,000.00

Project 2

“Planting food for endangered Carnaby’s Black-Cockatoo in the Calingiri IBA”

This project will help conserve and enhance the endangered Carnaby’s Black Cockatoo population by increasing the amount of native forage habitat in the Calingiri Important Bird Area and Piawaning townsite

Funding Requested = \$50,000.00

Project 3

“Protecting and enhancing the Moore River biodiversity assets”

This project will protect, enhance and connect up native vegetation in the upper Moore River catchment on farmland. MCC will hold educational events to ensure community and landholders are better informed of the importance of native vegetation on the farm for productivity and biodiversity.

Funding Requested = \$50,000.00

Project 4

“Protecting Beermullah, Gillingarra and Miling biodiversity through invasive pest control”

This project will work with three farming groups in Gillingarra, Beermullah and Miling to conserve Moore River catchment biodiversity by controlling foxes and rabbits on agricultural land and adjacent nature reserves through coordinated 1080 baiting and organised shoot events.

Funding Requested = \$37,510.00

Project 5

“Rehabilitation of the North Guilderton Dunes - stage 2”

This project is Stage 2 of the North Guilderton Dune Restoration Project which will rehabilitate 3ha of degraded tracks within the protected 22ha area. Revegetation will use a combination of nursery seedlings, vegetation brushing, and seedlings grown from community propagation.

Funding Requested = \$19,390.00

Coastwest Grants 2014/15 – Pending

Rehabilitation of Moore River Estuary Lookout Stage 2



This project is Stage 2 of a multi stage project to rehabilitate the Guilderton Moore River estuary lookout and surrounding dunes. This project will produce a comprehensive bushland and weed management plan for the Guilderton Moore River estuary lookout to be used for future planning and prioritisation of weed control and re-vegetation activities by the Shire of Gingin, local NRM community groups such as Moore Catchment Council and Lower Moore River Working Group, and the Guilderton Community Association. Community learning and on-site activities will create interest and active involvement of the ongoing rehabilitation of the lookout

Funding Requested = \$32,761.00

COGGO – COGGO Research Fund 2015 – Pending

Develop an understanding of herbicide interactions with ameliorated soils using farmer case studies

There is an urgent need to understand herbicide interactions with soils after they have been mouldboard ploughed or spaded. The label rates are too damaging for farmers to use on the ameliorated soils. These herbicides interactions need to be understood better so farmers can be confident with their rotations even up to at least 3 years after ploughing or spading.

Farmer experiences tell us that the biggest failures with these processes, is not getting the herbicide rate right on the soil type.

The aim is to use farmer to farmer case studies to document and communicate current practices.

Funding Requested = \$95,000.00

Unsuccessful Grants

Caring for our Country - Innovations Grant Application

Demonstrating efficient use of lime sands by strategic management of soil pH

Funding Requested = \$307,450.00

State NRM Program

Enriching native forage shrubs in the Moore Catchment

Funding Requested = \$ 50,000.00

DAFF - Community Food Grants

Bridging the city and country food production knowledge divide (Funding Program revoked)

Funding Requested = \$8,800



Sinister storm brewing over Latham



9.4 Moore Catchment Support

Supporters of Moore Catchment Council

Thank you to all the Members, Supporters, Volunteers and Funding Partners of the Moore Catchment Council without such support the Moore Catchment Council would not exist.

Photos in this publication taken by Rachel Walmsley unless otherwise indicated



Adopted by resolution at the Annual General Meeting 31th October, 2014

