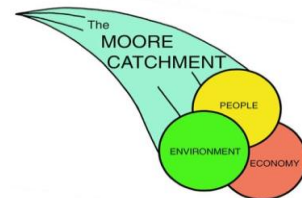




# M C C

**Moore  
Catchment  
Council**



## **Annual Report 2008/2009**



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



CARING  
FOR  
OUR  
COUNTRY



Government of  
Western  
Australia



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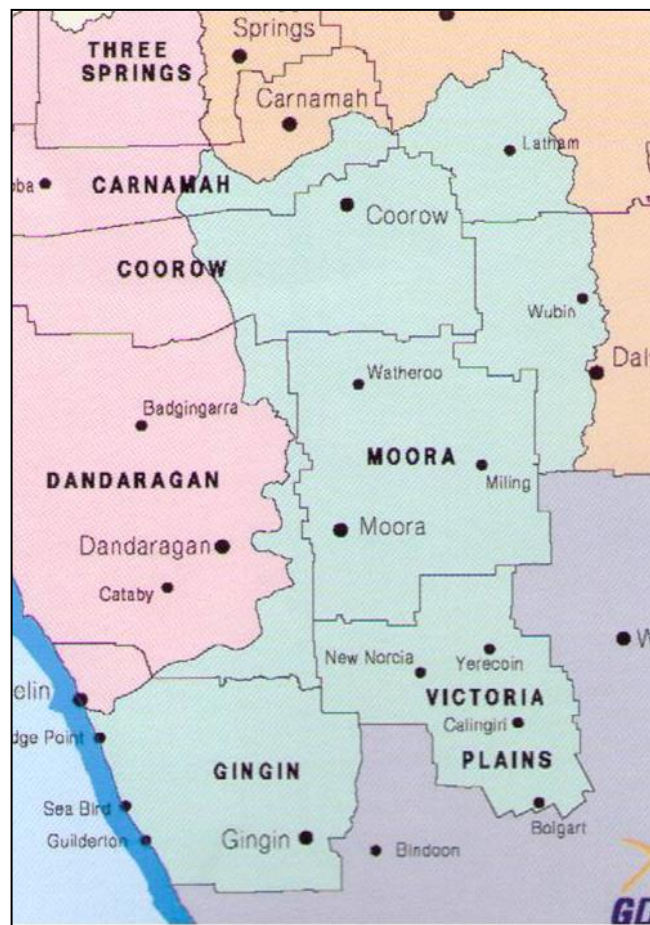
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# 1 Foreword

The Moore Catchment Council (Inc) was founded in 1995 as the Moore Catchment Group, with the aim of “working with community groups, local government and the agencies, towards a common goal of system and social sustainability through activities based on managing natural resources within the catchment.” (MCC Constitution, 2004).

The Moore Catchment Council (MCC) is one of four sub-regions of the Northern Agricultural Region (NAR), which is represented by the Northern Agricultural Catchments Council (NACC). NACC is the body that administers natural resource management funding for the sub-regions of the NAR.

The role of the MCC is to promote intergrated catchment efforts in the catchment to get the most effective action on the ground so that our natural resources can be enjoyed into the future.



The Vision of the MCC is that there will be a strong link between people, the economy and the environment.

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 Natural Resource Management Officers and Committee:

### Moora Office:

19 Dandaragan Street

P.O Box 337

Moora WA 6507

Phone 08 9653 1355

Fax 08 9653 1366

Website: [www.moorecatchment.org.au](http://www.moorecatchment.org.au)

### Staff Summary

Over this year we have employed:

#### Natural Resource Management (NRM) Officers:

**Rachel Walmsley** became a NRM Officer at MCC in early 2008 after emigrating from England in 2007 with her boyfriend Andrew who is employed as Irrigation Manager for Moora Citrus. Coming from a farming family and after gaining an Bachelor of Science honours degree in Earth Science, she then spent six years working in waste management for Biffa Waste Services as an Environmental Control Advisor. This role involved implementing and maintaining the environmental control systems (groundwater, surface water and leachate) on a landfill taking 200,000 tonnes of municipal waste per annum. The main focus of the role was to prevent contamination to the local heath land but also involved raising community awareness in waste management and ideas into recycling and waste reduction. She hopes to integrate her waste industry experience and knowledge into her NRM Officer role to help progress the Moore Catchment Council towards a sustainable and productive future.



**Ingrid Krockenberger** has recently joined the Moore Catchment Council after working at Murdoch University in teaching and research roles in the School of Environmental Science for the last 12 years. Her research interests in mine rehabilitation have investigated mine-pit revegetation and soil amendment for revegetating mine tailings. More recently, she has researched tree water relations in plantation forestry. Her tutoring roles have included water and earth science, land management, environmental management, management of aquatic systems, and environmental restoration



## Project Officers:



**Bronwyn Fox** - Control of Rising Groundwater & Salinity in the Koojan Gillingarra Region. Bronwyn has been living and working in the Dandaragan area since late 2003 when she completed her Bachelor of Science (Environmental Science) degree at Murdoch University, when the move was made to Dandaragan. In May 2007 Bronwyn commenced further studies at UWA carrying out her Masters in Business Administration (MBA). In June, Bronwyn decided to start her own business – Bronwyn Williams Consulting. Bronwyn has been working on the Koojan Gillingarra groundwater project since June 2007 to its conclusion in December 2008.



**Georgie Troup – Brushwood Project** – Georgie began with the Moore Catchment Council in November 2004 after completing her Bachelor of Science, majoring in Environmental Biology at Curtin University of Technology. Georgie had previously been volunteering with the Buntine Marchagee Recovery Catchment team, monitoring wetlands and vegetation near her home in Wubin. Georgie has a strong agricultural background in the WA wheatbelt, with experience in mining, farming and in the horse industry. The project concluded in Sept 2008.



### **Lana Kelly – East Moore Project**

Lana comes from a local farming family and was raised in Gillingarra, 30km south of Moora. She attended local schools before moving to Perth for university. After completing a Bachelor of Nursing she has worked for 10 years and remains a casual employee. Has and continues to work on the family farm assisting with problems relating to excess groundwater and salinity. Lana worked as Project Management Officer for the East Moore Project which was completed in December 2008



### **Helen Job – Brushwood Project**

Helen and family lives on a property at Southern Brook where the farming enterprise consists of Cropping and stock. Once the children were happy at school, Helen returned to studies . Two certificates in Landcare studies were studied through TAFE and the last one completed in 1998. Since 1998, tree cropping that assists any natural resource management element have been keenly followed. A discovery of a natural stand of *Melaleuca hamata* near the farm started the studying of the brushwood. In 1996 Helen Job joined the local catchment group. The projects that have been carried out under the management of Helen are: Natural Heritage Trust Wildlife Corridor through Southern Brook, Search for *Melaleuca* cultivar, plus various bio-diversity projects. Helen commenced on the Brushwood project 12<sup>th</sup> June, 2009

## Administration Staff:



### Melissa Treloar – Administration & Finance Officer

Melissa has lived in Moora with her husband and family for about 12 months, having moved from the coastal town of Leeman. The family has lived and worked in rural areas all around the state and are finding Moora a wonderful community to be involved in. Melissa enjoys admin and finance and by working alongside the wonderful NRMOs and Project Officers, is being educated in the ways of Natural Resource Management. Melissa and her husband left in October to further their business in Mt Magnet

### Helen Watkins – Administration & Finance 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 Finance & Administration Officer of the Moore Catchment Council and works 15 hours per week. Her Key responsibilities are administering the Finances and doing the day to day administration of the group, updating the website, keeping databases up to date and informing members what is happening with the MCC

### Executive and Finance Committee

Chairperson:	Geoff Erickson
Vice-Chairperson:	Lawrie Short
Secretary:	Barry Johnson
Treasurer:	Cynthia McMorrان

### MCC Committee:

Chairperson:	Geoff Erickson		
Vice Chairperson:	Lawrie Short		
Secretary:	Barry Johnson		
Treasurer:	Cynthia McMorrان		
Committee:	Noel Dodd	Mike Carter	Rebecca Carter
	John Longman	Reg Beale	Arthur Tonkin
	Duncan Peter	Jan Waite	Peter Waterhouse
	John Braid		

### MCC HR Committee:

Lawrie Short	Rachel Walmsley	Geoff Erickson	Helen Watkins	Barry Johnson
Lana Kelly	Cynthia McMorrان	Melissa Treloar	Georgie Troup	Bronwyn Fox
Helen Job				

### 3 Chairpersons Report:

Hello and welcome to the 2009 Annual Report. We are very fortunate to have had good rains so far this season.

2008-2009 has been an excellent year for MCC in terms of project funding. The Federal Government made \$224,000 available for the Increased Adoption of Sustainable Brushwood Production Project, under the highly contested Caring For Our Country (CFOC) Open Grants scheme. Moore Catchment Council was among very few Western Australian projects to receive funding.

MCC was also successful in the very competitive 2009-2010 round of the CFOC Grants, securing \$98,000 for the Productive Saltbush Pastures to Combat Wind Erosion in the Moore River Catchment Project. Again, Moore Catchment Council was among very few Western Australian projects to receive funding. Both are continuations of successful MCC projects, which shows confidence in MCC to deliver on-ground works.

We are also very pleased that the contracts for the Natural Resource Management Officers (NRMO) have been extended to 30 June 2010, after a tense period of waiting. However, the NRMO roles have changed so that from January 2010 they will be fully committed to delivering NACC Wind Erosion incentives funded by the Federal Government through CFOC. There is some debate and amusement about their possible new titles – e.g. Wind Erosion Incentive Regional Development Officers (WEIRDO).

The new system of Federal Government funding is proving to be very challenging due to the reporting requirements.

The unknown future of Local Government continues to be a concern.

Thanks to all of the MCC Committee and Staff for a successful and productive year.

Geoff Erickson

Chair MCC

## 4 Financial Report:

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

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On the basis of the information provided by the directors of MOORE CATCHMENT COUNCIL INC., we have compiled, in accordance with APES 315: Compilation of Financial Reports, the special purpose financial report of MOORE CATCHMENT COUNCIL INC. for the period ended 30 June 2009, comprising the attached Statement of Financial Performance and Statement of Financial Position.

The specific purpose for which the special purpose financial report has been prepared is set out in Note 1. The extent to which Australian Accounting Standards and other mandatory professional reporting requirements have or have not been adopted in the preparation of the special purpose financial report is set out in Note 1.

The Directors are solely responsible for the information contained in the special purpose financial report and have determined that the accounting policies used are consistent with the financial reporting requirements of MOORE CATCHMENT COUNCIL INC.'s constitution and are appropriate to meet the needs of the Directors and Members of the company.

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

To the extent permitted by law, we do not accept liability for any loss or damage which any person, other than the Company, may suffer arising from any negligence on our part. No person should rely on the special purpose financial report without having an audit or review conducted.

The special purpose financial report was prepared for the benefit of the Directors and Members of MOORE CATCHMENT COUNCIL INC. and the purpose identified above. We do not accept responsibility to any other person for the contents of the special purpose financial report.

PRACTISING ACCOUNTANTS

NORTH MIDLANDS ACCOUNTING  
SERVICE

CARNAMAH WA



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14 September, 2009



**MOORE CATCHMENT COUNCIL INC.**  
Detailed Balance Sheet As At 30 June 2009

	Note	2009 \$	2008 \$
<b>Current Assets</b>			
<b>Cash Assets</b>			
Cash At Bank Westpac A/C 117025		24,256	61,419
Cash Management A/C - Westpac A/C 123847		351,159	3,250
Westpac Term Deposit - A/C 141447		-	261,028
Westpac Term Deposit - A/C 141455		-	132,250
Cash on hand		25	16
		375,440	457,963
<b>Receivables</b>			
Trade debtors		59,337	317,859
Grants Brought Forward		-	709,489
		59,337	1,027,348
<b>Total Current Assets</b>		<b>434,778</b>	<b>1,485,311</b>
<b>Total Assets</b>		<b>434,778</b>	<b>1,485,311</b>
<b>Current Liabilities</b>			
<b>Payables</b>			
<b>Unsecured:</b>			
Trade creditors		63,667	18,852
		63,667	18,852
<b>Current Tax Liabilities</b>			
GST clearing		6,186	(16,810)
Amounts withheld from salary and wages		9,778	14,578
		15,964	(2,232)
<b>Total Current Liabilities</b>		<b>79,631</b>	<b>16,620</b>
<b>Total Liabilities</b>		<b>79,631</b>	<b>16,620</b>

These financial statements are unaudited. They must be read in conjunction with the attached Accountant's Compilation Report and Notes which form part of these financial statements.

**MOORE CATCHMENT COUNCIL INC.**  
**Detailed Balance Sheet As At 30 June 2009**

	Note	2009 \$	2008 \$
<b>Net Assets</b>		<u>355,147</u>	<u>1,468,691</u>
<b>Equity</b>			
Retained profits / (accumulated losses)		<u>355,147</u>	<u>1,468,691</u>
<b>Total Equity</b>		<u>355,147</u>	<u>1,468,691</u>

---

These financial statements are unaudited. They must be read in conjunction with the attached Accountant's  
Compilation Report and Notes which form part of these financial statements.

**MOORE CATCHMENT COUNCIL INC.**  
**Detailed Profit and Loss Statement**  
**For the year ended 30 June 2009**

	2009	2008
	\$	\$
<b>Income</b>		
Grants Received	515,109	1,226,946
Interest received	20,871	32,800
Membership Fees	3,000	3,550
Equipment Hire	182	91
Donations	710	100
Project Income	-	6,146
Project Management Income	47,868	65,776
Seeds & Seedling Sales	15,660	8,992
Office Lease	327	1,540
Refunds	3,262	3,349
Total income	<u>606,989</u>	<u>1,349,290</u>
<b>Expenses</b>		
Advertising and promotion	800	1,941
Audit fees	3,450	2,260
Bank Fees And Charges	818	1,174
Catering - Meetings	3,125	2,287
Cleaning - Office	70	-
Contract Wages	18,013	23,207
Electricity	707	726
Grant Funding returned	119,344	79,828
Gratuity	-	117
Hire - Meetings	587	695
Incidentals	898	-
Insurance	1,431	1,350
Insurance - Workers Compensation	367	1,407
Interest Paid	119	69
Internet Fees	1,125	1,676
Legal fees	-	1,867
License Fees	49	-
M/V commercial - Lease	38,053	23,593
M/V commercial - Repairs	15,322	17,501
Office Supplies	1,269	679

These financial statements are unaudited. They must be read in conjunction with the attached Accountant's  
Compilation Report and Notes which form part of these financial statements.

**MOORE CATCHMENT COUNCIL INC.**  
**Detailed Profit and Loss Statement**  
**For the year ended 30 June 2009**

	2009 \$	2008 \$
Postage	738	1,023
Printing & stationery	1,401	2,177
Project Management Expenses	50,321	65,912
Consultants	12,030	-
Contractors	45,869	34,322
Fencing Materials	20,689	43,784
Field Days	6,435	1,877
Printing	11,223	2,400
Machinery Hire	91	91
Seeds & Seedlings	282,220	199,836
Travel Expenses	4,705	5,416
Equipment Purchase	1,571	4,257
Weeds and Pest Control	7,061	-
Plant Classification	5,035	-
Incentives	13,576	-
Publications	30	153
Rent - Office	6,655	6,182
Rental Assistance	5,620	-
Repairs & maintenance	645	1,647
Sitting Fees	3,653	5,050
Staff training	1,840	3,248
Superannuation	15,515	15,669
Telephone	4,472	4,708
Wages	157,658	173,466
Wages - Finance Contract	24,156	25,222
Total expenses	<u>888,758</u>	<u>756,819</u>
<b>Profit (Loss) from Ordinary Activities before income tax</b>	<u><b>(281,769)</b></u>	<u><b>592,471</b></u>

These financial statements are unaudited. They must be read in conjunction with the attached Accountant's  
Compilation Report and Notes which form part of these financial statements.

## 5 Auditors Report:

**N**

**NORTH MIDLANDS  
ACCOUNTING SERVICE**  
*Practising Accountants &  
Tax Agents*

MOORE CATCHMENT COUNCIL INC

**M**

INDEPENDENT AUDITOR'S REPORT  
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 period ended 30<sup>th</sup> June 2009. 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 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.

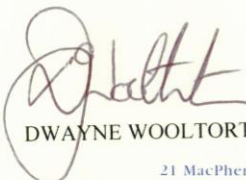
Qualification

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 reflect 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 period ended 30<sup>th</sup> June 2009 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 ANIA

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 ■ alycemc@westnet.com.au  
BIGCHANGE PTY LTD ■ ACN 104 484 040 ■ ABN 38 906 867 264



## 6 Statement by Members:

**MOORE CATCHMENT COUNCIL INC**  
**CERTIFICATION OF ACCOUNTS**  
**STATEMENT BY MEMBERS OF THE COMMITTEE**

In the opinion of the committee of the Moore Catchment Council Inc.

1. The accompanying Financial Statements for the year ending 30 June 2009 present fairly, the financial position of the Moore Catchment Council Inc as at 30 June 2009 and results of its operations for the year ended are in accordance with the Australian Accounting Standards: and
2. The operations of the Moore Catchment Council Inc have been carried out in accordance with the Constitution of the Moore Catchment Council Inc.

Signed on behalf of the Committee

  
.....  
CHAIRPERSON

  
.....  
SECRETARY

Dated this 6 day of November 2009

## 7 Projects:

### 7.1 *Creating Productive Saltbush Pastures on Saline Land*

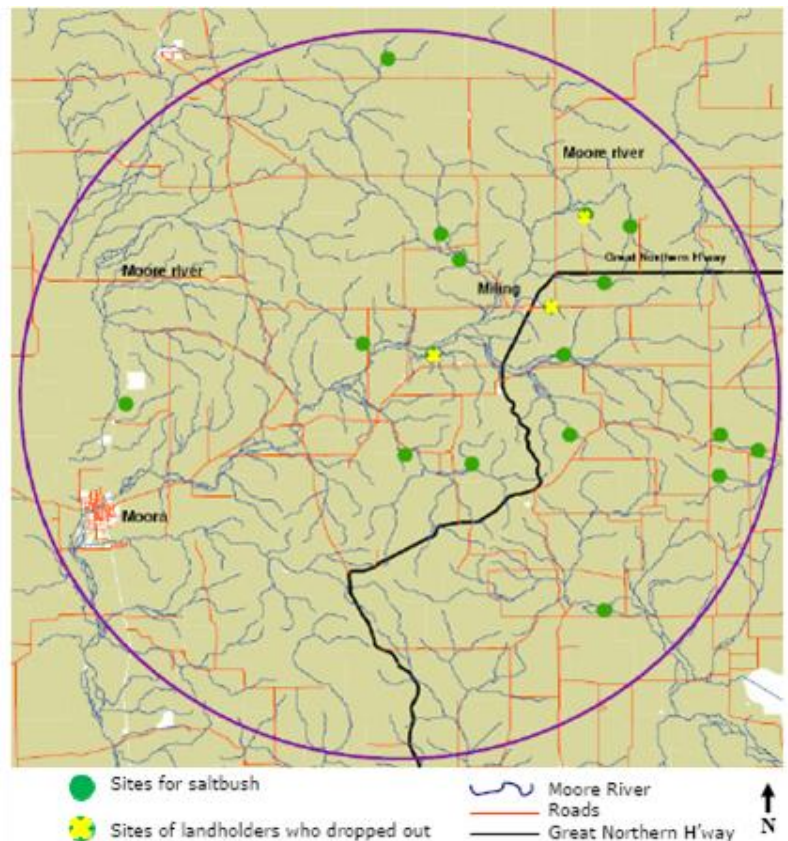
Project report by Rachel Walmsley

The project 'Creating Productive Saltbush Pastures on Saline land' in the eastern Moore river catchment went from June 2007 and concluded in September 2008, and has produced encouraging results for the region's future application of saltbush pasture as a sustainable farming practice. Over **130,000 seedlings** have been planted as part of the project on fifteen sites in the area.

The Moora-Miling Pasture Improvement Group (MMPIG) partnered with the Moore Catchment Council (MCC) in 2007 to implement the National Landcare Program funded project 'Creating Productive Saltbush Pastures on Saline Land' which aimed to improve profitability and agricultural sustainability of the farmers in the region by actively tackling saline land. The Northern Agricultural Catchment Council's regional strategy has identified that 11% or 175,632 hectares of agricultural land in the Moore River catchment as yielding consistently low production.

The aims of the project were to:

- Increase the success rate of planting saltbush pastures through the provision of technical support and information
- Actively engage farmers into the overall benefits of saltbush and encourage them to actively change their farming systems by incorporating saltbush pastures.
- Contribute to the reduction of water tables, soil salinity, soil erosion, surface water run-off and recharge in the Moore catchment, thereby contributing to peak flow reduction and flood mitigation.



The project commenced in June 2007 with fifteen landholders, who possessed varying previous saltbush experience, signing up keen to grow saltbush pastures. The original allocation of subsidised seedlings was set at 10,000 per landholder with fencing also being funded to ensure stock proofing was carried out. Old Man and River saltbush were considered the best species to plant from past experience and technical advice, but also the project intended to trial Rhagodia to test its effectiveness in the region. Landholders were given the option to purchase and plant their own saltbush, or participate in a coordinated effort with seedlings and ground works provided. The project sought the expertise of many representatives from various agencies including Ian Pulbrook of Greenoil Nursery in Mingenew who provided technical assistance with site selection and the nursery space to grow the majority of the saltbush seedlings. Once the seedlings were ordered, individual site visits and suitability assessments could commence with eighteen sites on fifteen properties. Fencing was offered as part of the project subsidies to ensure good establishment of the saltbush by keeping stock and pests out. All sites were measured for area and length of fencing required, and then recorded on to GIS. Management plans and agreements were then drawn up outlining criteria to be followed including future grazing management and pest control.



### Participants

Landholder	Number of saltbush seedlings	Area of land allocated for saltbush	Length of funded fencing
Andrew & Michelle Barnard	4,928	8.9 ha	
Quentin Bricknell	10,000	53.5 ha	
Les & Ann Crane	6,500	13.7 ha	
Phil Gardiner	10,000	30.5 ha	1.5 km
Richard Humphry	12,000	22.2 ha	
Frank & Marge King	10,000	10 ha	
Jeremy Lefroy	2,000	7.5 ha	1.5 km
Kristen Lefroy	8,000	37.2 ha	1.5 km
Stan & Ann Lewis	10,000	29.6 ha	
Neil & Leanne Pearse	7,000	3 ha	
Ken Seymour	12,000	49.8 ha	
Bruce Topham	10,000	13.6 ha	
Tony White	18,000	18.9 ha	1.5 km
David McLagan	Pulled out		
Ian & Johanna Seymour	Pulled out		
<b>Total</b>	<b>120,428</b>	<b>298.4 ha</b>	<b>6 km</b>

Saltbush left over to fill gaps next year

10,500



#### River saltbush - *Atriplex amnicola*

Moderate to high salinity tolerance and high drought tolerance. Once established can survive several weeks of winter



#### Old man Saltbush - *Atriplex nummularia*

Moderate salinity and high drought tolerance. Once established extremely tolerant of heavy annual grazing for short periods.



#### Rhagodia - *Rhagodia spp*

Moderate tolerance to saline lands but not as adapted to waterlogged land as the other species used.



As part of the training offered by the project, a 'Tips and Tricks to Successful Tree Planting' workshop was held at two locations in June and included information on hand versus machine planting, watering techniques and seedling care all delivered by Department of Environment and Conservation, Moore Catchment Council and Wongan Hills nursery employees. Participants of the project as well as other interested people came along to an informative workshop.



By July, all fencing works had been carried out and planting activities began. Two landholders decided to drop out of the project for differing reasons which left thirteen. Participants who did not want to be involved with the group planting were advised to rip and mound the ground in advance of planting to allow excess salt to leach out and reduce waterlogging effects, then plant at 2m intervals. Ian Pulbrook and his team from Mingenew were engaged to conduct site preparation and planting works, due to his good reputation with saltbush pasture establishment. These works did not begin until much later than anticipated due to Ian's work commitments and adverse weather conditions in July, but what followed was a well conducted and executed plan of action that saw 82,000 seedlings planted on ten sites in a just a few weeks in August. Ian's team first ripped and mounded the sites which resulted in a 50cm high mound. His team then hand planted each seedling and ensured it was well placed in the mound. The month that followed caused much anxiety because no rain was experienced and many of the participants thought that the saltbush would not survive such adversity. Ian reassured many times that the big mounds were the key to ensuring successful establishment because they contained sufficient moisture to get the seedlings going.



Planting 82,000 saltbush seedlings was not without its problems!

The Moora-Miling Spring Field day on September 17<sup>th</sup> presented the ideal time to showcase the project and a visit to Ken Seymour's property to his recently planted saltbush pasture was included. Members of the MMPIG, MCC and Ian Pulbrook were on hand to answer questions from a number of

farmers who wanted to find out more about the benefits of saltbush pasture and whether it could be incorporated into their farming systems. Ken's property already displayed a good success rate, but it was not until mid October/November that the overall success of the saltbush plantings in the project was apparent.



Field day at Ken Seymour's property in September after planting, and again in November - 100% success rate!



On subsequent visits to all the sites to install photo points for long term monitoring, survival rates and general appearance were also assessed. Even on the saltiest sites, survival rates were astounding with the mounds playing the pivotal part in the high survival rates observed. The salt had visibly drained from the mounds ensuring a more desirable growth environment. Compared with those sites that did not have such big mounds, these plants displayed more vigorous and healthy growth. Some of the participants were positively astounded when viewing the saltbush pastures up close as they had believed that they would not have survived the dry winter conditions. Many have already expressed intentions for further saltbush planting in the near future as they can already see the economic, environmental and aesthetic benefits of establishing saltbush pastures.

Even though the project has officially ended, the MMPIG and the MCC will continue monitoring and promoting these pastures to ascertain best practice for growing saltbush and use as an education tool to encourage other landholders in the benefits of saltbush. The Moore Catchment Council has been successful in obtaining hotly contested CFOC funding to continue this project for another year - see page 40. This new project will help encourage and extend the establishment of saltbush pastures to a wider area by planting an additional 144,000 seedlings. This will truly insure the transformation of vast areas of unproductive secondary saline land into productive sustainable pasture.





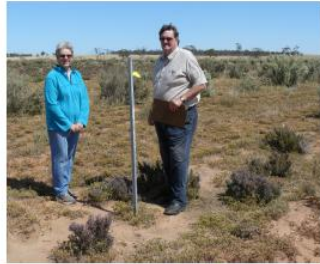
Andrew & Michelle Barnard



Frank & Marge King



Ken Seymour



Bruce & Cynthia Topham



Jeremy Lefroy



Kristin Lefroy

Pictures from Aug-Nov 2008



Les & Ann Crane



Neil & Leanne Pearce



Phil Gardiner



Quentin Bricknell



Richard Humphry



Stan Lewis



Tony White

Pictures from Aug-Nov 2008

Happy farmers and photo monitoring points

Comments from participants included:

*".....a good survival rate will ensure salt reduction and help drought proof our farm in the future..."*

*".....the project would not have worked, if not for the hard work of the Moore Catchment Council staff..."*

*".....we plan to plant 300-400 ha in the next few years because of this project..."*

Amount Received as at 30 <sup>th</sup> June 2009	83,399.77
Amount expended as at 30 <sup>th</sup> June 2009	83,399.77
Balance of funds in project as at 30 <sup>th</sup> June 2009	0.00

## 7.2 Great success for SMART Homes & Gardens

Over 50 people attended the first SMART Homes & Gardens 'Energy Efficiency' workshop in Dalwallinu on 19<sup>th</sup> May which was organized through the Moore Catchment Council and the Yarra Yarra Catchment Regional Council.

The Perth based Great Gardens team came and delivered a most interesting and engaging presentation on all the tips and tricks to being energy efficient without costing your wallet or the environment.

The wealth of energy efficient information included easy and inexpensive ways in which to cool your house in summer and keep warm in winter, home renewable energy costs and myths, water wise garden tips and ways to fertilise without buying a myriad of expensive chemicals.

Everyone went home with a head full of useful and practical information as well as a goody bag which included an energy efficient globe, wetting agent, seeds, fertilizer and money off vouchers.



Attendees came a range of places including Goomalling, Cadoux, Wongan Hills, Coorow, Moora, Watheroo, Perenjori and Morawa

The door raffle prize of an array of useful home and garden goodies was won by a happy Judy Gould.

Everyone had a great day and feedback was very positive. Rachel Walmsley (Moore Catchment Council) and Lizzie King (Yarra Yarra CRC) would like to thank everyone for coming and also offer big thanks to the sponsors – Synergy, Shire of Dalwallinu, Avon Waste and Home Timber & Hardware for their contributions which made this event possible.

Due to its success, another SMART Homes & Gardens event is already being planned for the spring

### 7.3 Control of Rising Groundwater & Salinity in the Koojan Gillingarra Region

Project Manager – Bronwyn Fox; article by Ingrid Krockenberger

The Control of Rising Groundwater and Salinity in the Koojan Gillingarra Region project (Fig. 1) was completed in December 2008. The project was developed in response to concerns within the local community about rapidly rising groundwater in the region, occurring in an unpredictable way based on current understanding.

The major outcomes of the project were:

- groundwater workshop conducted;
- Local Area Plan developed;
- groundwater monitoring program developed;
- on-ground works incentives delivered, and;
- additional groundwater monitoring sites established in the Capitela Valley.

The groundwater workshop during the initial stages of the project enabled interested people, including government agency hydrologists and local landholders, to discuss the groundwater characteristics of sites targeted for further investigation.

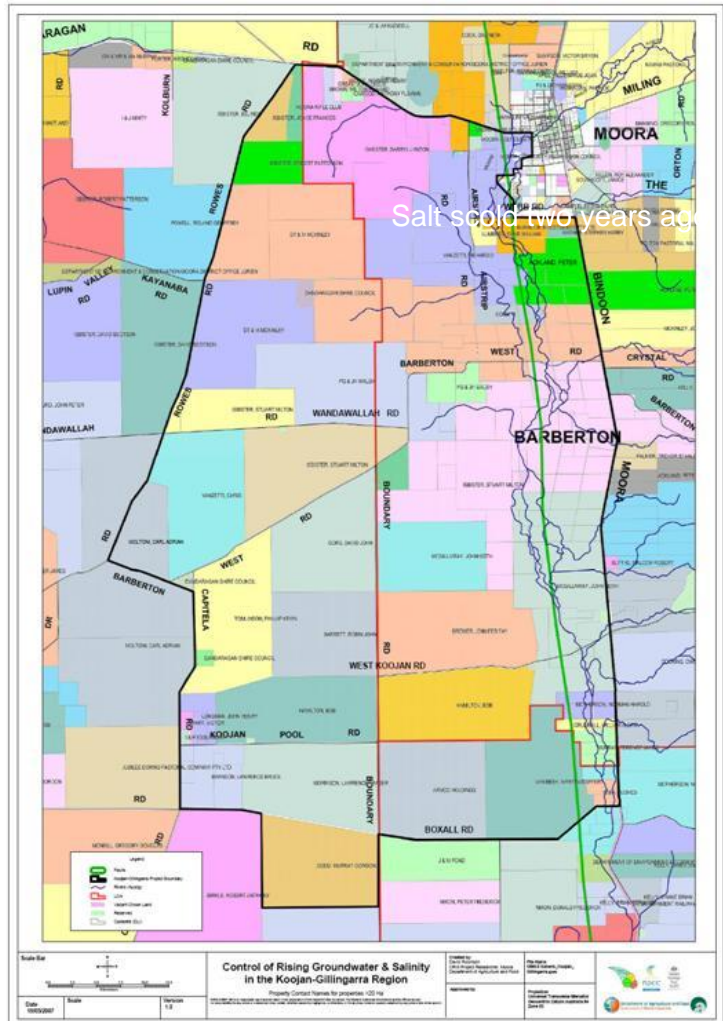


Figure 1. Project area boundary.

The key sites were:

- Wandawallah Lake, formerly a claypan swamp which developed after 1992 into a 25 ha area of permanent water;
- newly inundated and waterlogged areas within remnant vegetation in a shire reserve and an adjacent pine plantation, and ;
- Koojan West Lake (Fig. 2), which appears to be an ancient lake relict indicated by clay deposits and has only recently become inundated.

Discussions held during the groundwater workshop and literature research undertaken for the Local Area Plan led to greater understanding of groundwater processes impacting on the key sites, although there is still much to be learnt about the complex (and largely invisible) processes of groundwater



systems in the region. However, the findings of the initial investigation are important to help inform management decisions in existing and potential trouble spots threatened by rising groundwater and salinisation.

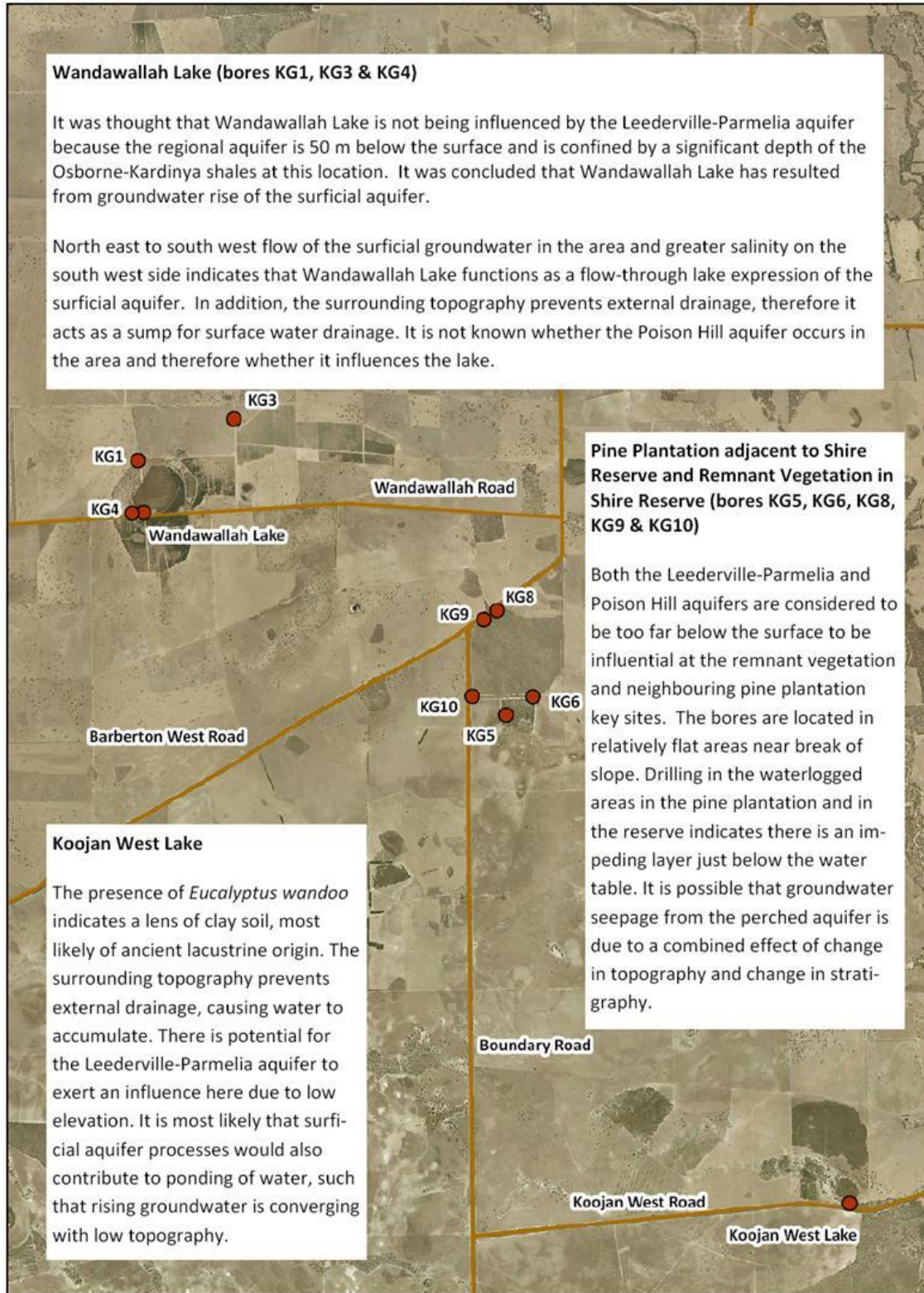


**Figure 2. Reflections on Koojan West Lake. Tree deaths were caused by rapidly rising groundwater and salinisation.**

Observation bores were constructed at the key sites to monitor groundwater levels and groundwater salinity (Fig. 3). The results of groundwater monitoring are shown in the following pages. The general trend was for the groundwater levels and salinity to be stable over the measurement period, with only seasonal fluctuations. Bore monitoring will continue, to determine whether groundwater processes have reached equilibrium at these locations or whether the stable trend is a reflection of reduced rainfall in recent years.

Water salinity was monitored at Wandawallah Lake and Koojan West Lake over the project period. Average salinity at Wandawallah Lake was 8.8 mS/cm (brackish) and varied seasonally from 6.9 to 10.4 mS/cm. Average salinity at Koojan West Lake was 9.7 mS/cm (brackish to saline) and varied seasonally from 6.3 to 15.4 mS/cm.





**Groundwater and lake monitoring sites**

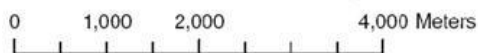


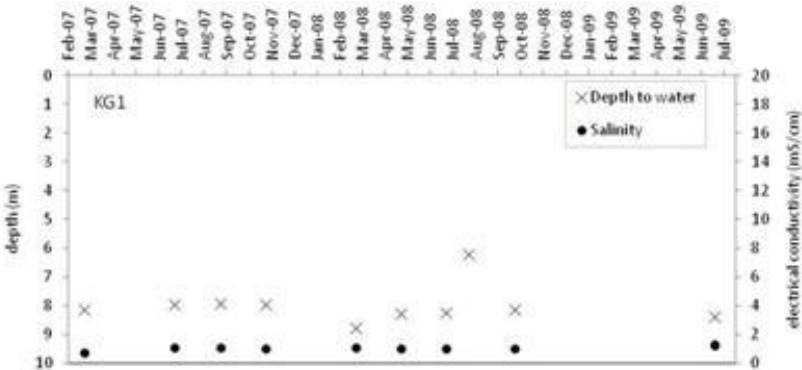
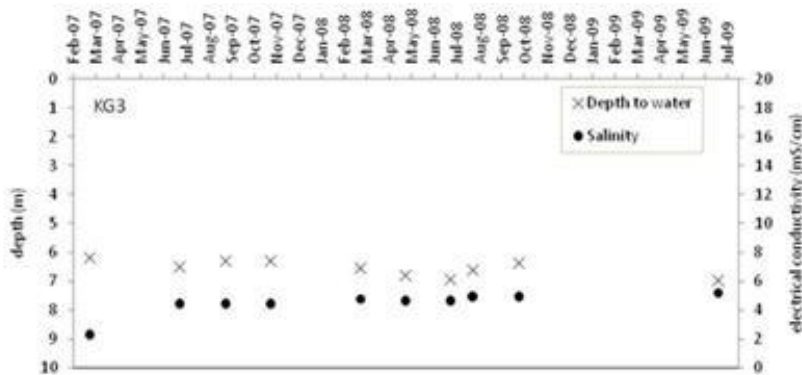
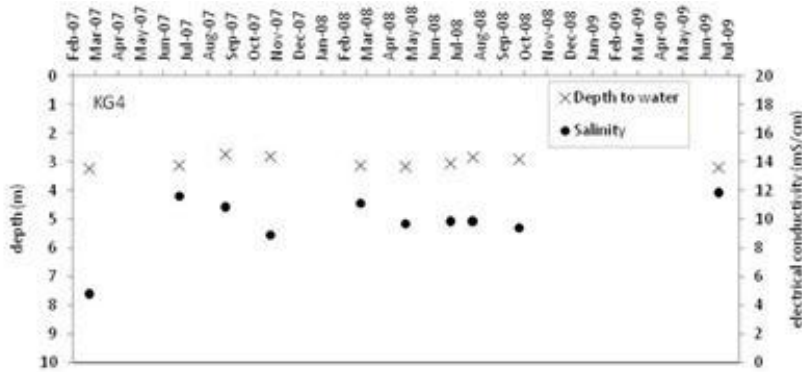
Figure 3. Locations of monitoring bores and descriptions of groundwater processes affecting the sites.



# Groundwater Monitoring

## Wandawallah Lake

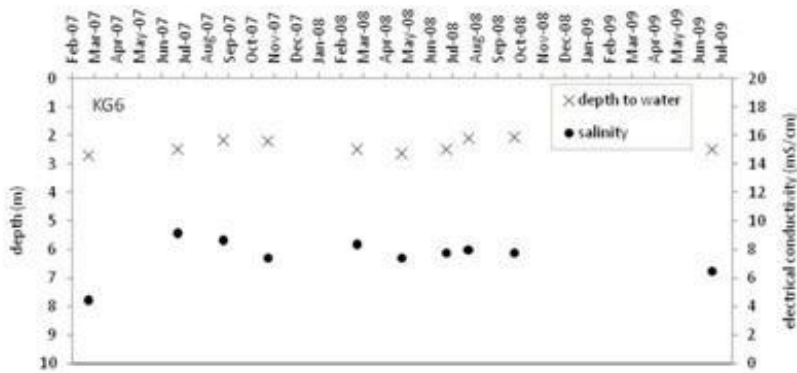
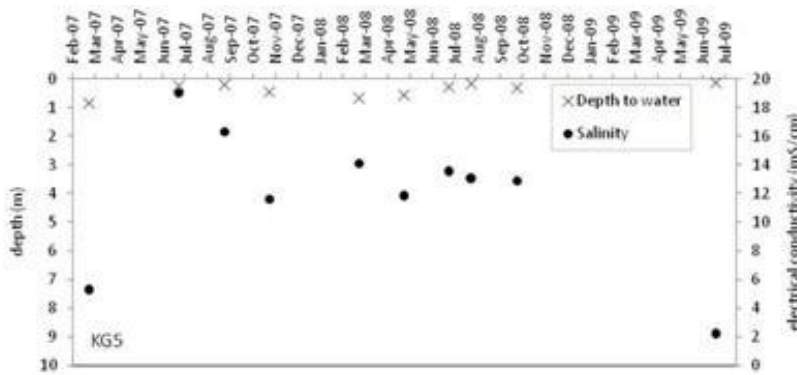
KG4 is located closest to the lake, therefore the groundwater level and salinity are highest. It is mildly saline. KG1 has the highest landscape position, therefore it is least influenced by groundwater and has marginal salinity. Groundwater sampled from KG3 is brackish.



## Groundwater Monitoring

### Pine plantation adjacent to the shire reserve

KG5 is located near the lowest point in the pine plantation. Groundwater is mildly saline and is very near the surface, which has led to plantation collapse. Low EC readings from Feb '07 and June '09 are thought to not accurately reflect groundwater salinity. KG6 is further upslope and the groundwater is within 3 m of the surface and is brackish. The pines are healthy but the adjacent native vegetation is in serious decline.

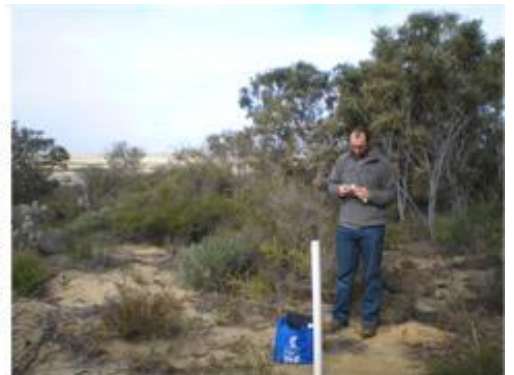
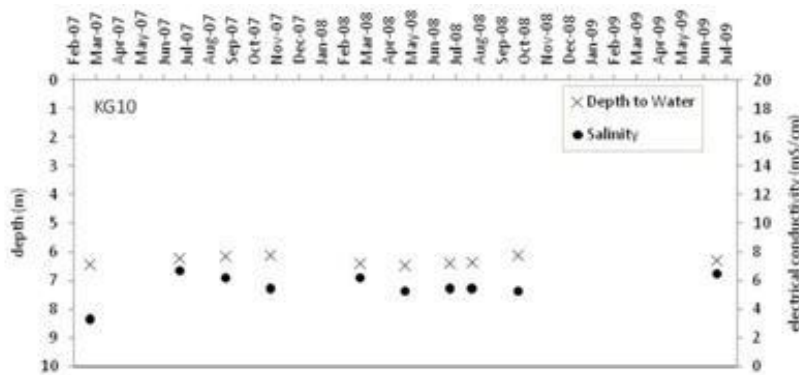
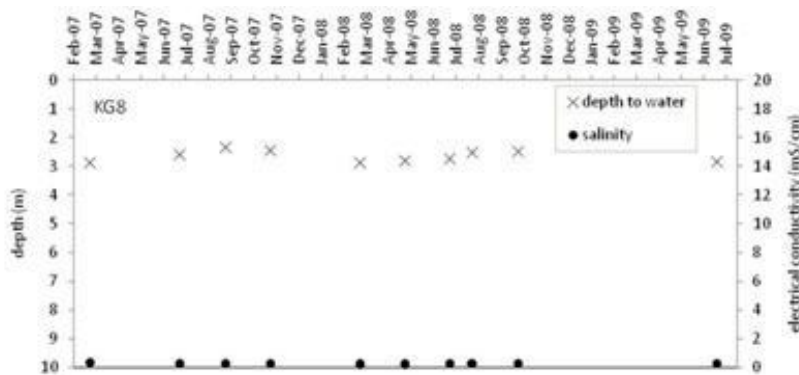
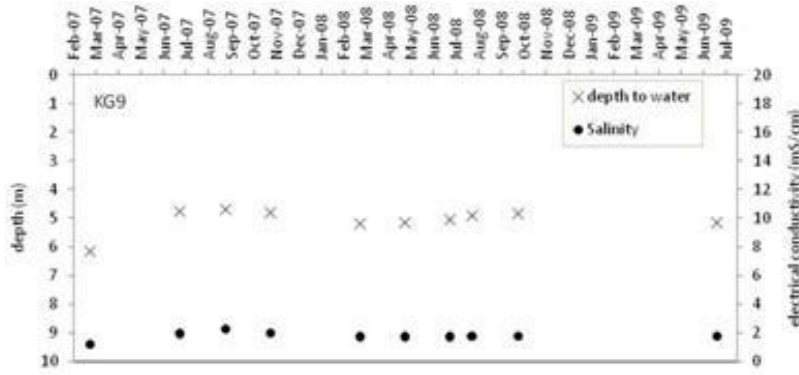


## Groundwater Monitoring

### Remnant vegetation in the shire reserve

The freshest groundwater is located at KG8, which is in a low landscape position and groundwater is within 3 m of the surface. There is a very slight decline in the banksias. KG9 is fresh to marginal, with groundwater within 6 m of the surface. Vegetation is very healthy. KG10 is in the highest landscape

position and the vegetation is very healthy. Although the groundwater is brackish, it is sufficiently deep not to be a problem.



The Local Area Plan provides direction for management of rising groundwater and salinity in the region. It offers a number of management options for local action under the broad categories of Integrated Water Management, Plant Based Management, Soil Management and Value Adding Enterprises. The specific options were evaluated for feasibility and likely effectiveness through discussions at the groundwater workshop. The results of the assessment process are given in the Local Area Plan.

Some of the management options recommended in the Local Area Plan were incorporated into an incentive scheme to enhance adoption of suitable practices to control rising groundwater and salinity. There was a great deal of interest from landholders in the on-ground works incentives offered by the project (Table 1). The vast majority of the expressions of interest were taken over by the NACC Targeted Investment Program (TIP), which offered the same on-ground works incentives. Management agreements were made through the project for perennial pasture establishment, farm forestry and native vegetation management, totaling 142 ha and 13 km of fencing (Table 1). Works were completed by the landholders in perennial pasture establishment and farm forestry, totaling 78 ha and 5 km of fencing (Table 1).

**Table 1. The amount of interest in on-ground works, and management agreements completed and works carried out by the project.**

On-Ground Works	expressions of interest		mgt. agreements offered		works carried out	
	area (ha)	fencing (km)	area (ha)	fencing (km)	area (ha)	fencing (km)
saline land mgt.	0	0	0	0	0	0
perennial pastures	420	18	98	7	44	5
farm forestry	60	0	44	0	34	0
native vegetation mgt.	548	52	0	7	0	0
strategic revegetation	107	70	0	0	0	0
surface water mgt.	10	12	0	0	0	0
<b>Total</b>	<b>1144</b>	<b>151</b>	<b>142</b>	<b>13</b>	<b>78</b>	<b>5</b>

As many of the initial expressions of interest were taken over and implemented by NACC's TIP, project funds became available for the establishment of groundwater monitoring sites in the Capitela Valley through a contract variation negotiated with NACC. The exciting results of the drilling program undertaken to construct the monitoring bores are reported in the following article, "High Quality Water Resource Discovered in the Capitela Valley".

Although the project has ended, there is much on-going interest in the problems and opportunities presented by groundwater in this part of the Northern Agricultural Region.

<b>Amount Received as at 30<sup>th</sup> June 2009</b>	<b>213,969.17</b>
<b>Amount expended as at 30<sup>th</sup> June 2009</b>	<b>213,969.17</b>
<b>Balance of funds in project as at 30<sup>th</sup> June 2009</b>	<b>0.00</b>



## High Quality Water Resource Discovered in the Capitela Valley.

The Moore Catchment Council project, Control of Rising Groundwater and Salinity in the Koojan Gillingarra Region, established groundwater monitoring sites in the Capitela Valley (Fig. 1) in late 2008. The drilling investigation during the construction of the monitoring bores revealed an important discovery. The valley is filled with paleochannel sediments, indicating that this is the location of an ancient river channel. Although about 10 km of paleochannel sediments were identified, it is not known where the ancient river channel begins or ends. The valley to the north exhibits similar surface features, as well as paleochannel sediments where it joins the Capitela Valley.

The sediments are at least 61 m thick and may be as wide as 1000 m. Rough calculations indicate that the paleochannel may contain 50-100 gigalitres of high quality water in the sandy sediments of the main channel. An additional 15 gigalitres was estimated to be contained in the valley to the north.

The Capitela Valley is located within the Department of Water Gingin Groundwater Area and the Leederville-Parmelia groundwater resource is fully allocated in this subarea. Although there may be connectivity with the regional Leederville-Parmelia aquifer at the sides, the paleochannel groundwater was identified as a surficial aquifer which is generally available for allocation. This means that the newly discovered groundwater resource may be available for use in production systems of various enterprises. Further investigation of the potential for allocation is underway.

**Source:** Speed, R., Kendle, A. and Gibbon, W. (2008). *Capitela Valley Drilling Report*. Unpublished report. Department of Agriculture and Food, Geraldton.

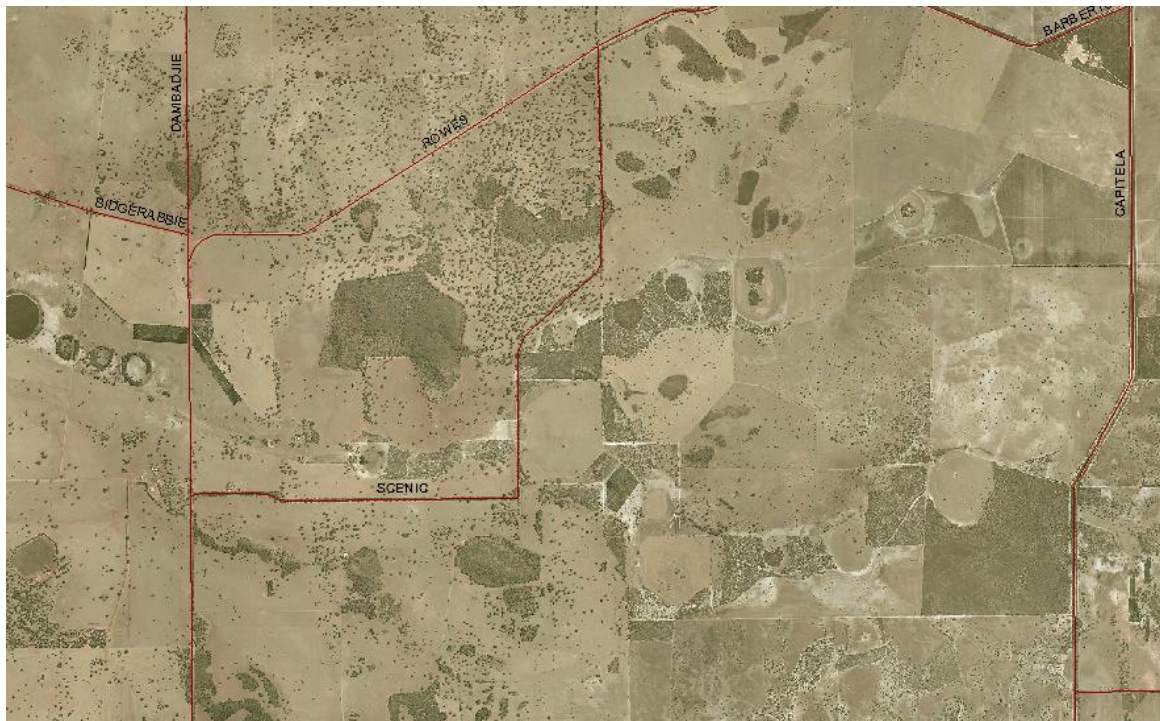


Figure 1. The Capitela Valley is characterised by relict lakes (circular features in aerial photo) along the valley floor.



## 7.4 MMPIG Autumn Field Walk 24<sup>th</sup> March 2009, Miling

Participants jumped on a bus and visited 3 saltbush sites from the recent NLP MMPIG/MCC project. Ian Pulbrook was on hand to explain good grazing management and advised not to let stock totally eat out the paddocks in the first year to allow the saltbush to establish well. Then it was on to Paula Moore's farm where she explained why alpacas are good with controlling fox attacks on sheep. Dan Walsh (DAFWA) then talked about 1080 baiting and the permits needed to buy and apply it. After this it was back to the Miling sports club for a very informative presentation by John Berger (DAFWA) on Slender Iceplant and various pre and post emergent control methods. This was followed by a BBQ. Thanks to all that came along.

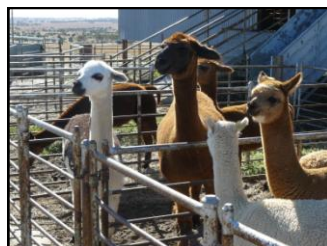


The saltbush pasture at Ken Seymour's farm has been very successful. This is mainly due to the mounding work that was carried out before planting. Ian Pulbrook explains to the group how to graze the new pasture correctly by looking at the plants and working out how much can be eaten off without causing stress.



Neil Pearse has been most impressed with the saltbush establishment on his land. From unproductive land to green productive pasture

Paula Moore explains alpaca use on the modern farm. They can be very helpful with fox control and even weed control., plus they are very cute! She can rent them out to help at lambing time if anyone is interested in having a go.



## 7.5 Moore Family Fun and Facts:

The Moore Catchment Council has a new educational resource called 'Moore Family Fun & Facts' which is aimed at all kids, parents, community and the young at heart. It's full of interesting NRM facts about the Moore Catchment and also fun activities to keep the kids amused as well as educating them on what natural resources are and why we should be managing them well. Drop into the office to pick up a copy or phone to have one sent out.

**Moore Family Fun & Facts**  
Edition 1  
2009

INSIDE THIS ISSUE:

- Beautiful but Deadly - rising ground water 3
- Moogies for Mowers - SW WA is biodiversity 3
- Woods Watch quiz - do you know your woods? 3
- What a big waste! Do you know the waste hierarchy? 6
- Big NRM word search - can you find all the words? 5
- Farmer Focus 6
- Can you count the Karanby Cuckoos? 7
- A day in the life of... 8

Did you know..... the Moore river is named after George Fletcher Moore who explored the area in 1826

**Quick Quiz**

What do you know about your local river ??

1. Where does the Moore river enter the sea?
2. What year was the last great flood event?
3. Name 3 towns the Moore river flows through?
4. Where does the name Moore come from?
5. How big is the Moore river catchment?

Yeah! Find all the answers within this book.

### Farmer Focus

Tony White lives on a farm just outside Miling. He farms wheat, cattle and sheep on his 6000 ha property. Tony is heavily involved in natural resource management in the catchment and is a member of various groups including the Moora-Miling Pasture Improvement Group (MMPIG).

Tony's message to everyone is:

"I think it is everyone's responsibility to help protect our native flora and fauna, and their ecosystems.

As farmers, we work with and look after the environment every day. Without healthy soils and good water, we cannot farm and grow the food for the population. So lets all work together and protect the environment so everyone can enjoy it."

Tony White

Tony has just been to a natural resource management meeting but has forgotten how to get home to the farm! Can you help him?

Page 4

### What a big waste!

Did you know that WA produces 1.4 tonnes of waste per person per year. That's the weight of 16 fully grown kangaroos! 3 million tonnes a year of waste in WA ends up in a landfill where the waste biodegrades and can cause lots of environmental problems. This includes contamination of surface and ground water, and also the production of polluting gases including methane, carbon dioxide and hydrogen sulphide which contributes to the warming of the climate.

**waste facts**

- Banana skins take 2 years to break down - a small worm farm will eat a banana skin in 2 weeks
- Cans take 500 years to break down
- Glass bottles can take 1000 years to break down
- Plastic bags take 10 - 20 years to break down
- Cigarette butts take 1 - 5 years to break down

**What can you do?**

- Avoid/Reduce** - don't create the waste in the first place, or stop and think 'do I really need that?'
- Reuse** - try not to buy disposable or new items all the time. Reuse old containers and material. Great!
- Recycle** - if you have a kerbside or town recycling scheme—use it! Buy recycled products, it saves energy. Compost kitchen waste and use it on your garden to grow veggies. Excellent!

**The Waste Hierarchy Triangle**

Have you seen one of these before? The triangle tells you what you should and shouldn't be doing with your rubbish. The big green end is what you should be doing and the small red end is what you should avoid! Look at the words around the triangle **dispose, reduce, recycle, avoid, reuse**. Can you put the correct words into each section of the triangle - the smiley faces should help you.

Page 4



## 7.6 Yued Celebration Day at Mogumber 8<sup>th</sup> November 2008



The Moore Catchment Council was invited along to the Mogumber Farm to celebrate the achievements of the Yued Heritage Projects, and to have a display of natural resource management information and resources. It was a particularly hot day but still, many local Yued people came to hear what the project has achieved and what the future holds. Members of the Yued Advisory Group spoke about their personal experiences of the project which was presided over by Marissa Maher. Lots of information was distributed especially the kids activity books.

## Mogumber Cultural Trail at Mogumber 5<sup>th</sup> November 2008



As a member of the Yued Advisory Group, the Moore Catchment Council NRM O's attended a workshop for establishing a cultural trail from the cemetery on the Mogumber West Rd to the Mission Farm. Participants walked the proposed trail and observed all the wonderful flora and fauna on the way.

Many Indigenous cultural stories were told on the walk including the relevance of floral seasonal indicators. Mal Ryder (right) sat under a Mooja or Christmas Tree and explained its importance with indicating when Red Mullet is spawning at the coast.



## 7.7 Envirofunds -

**Reclaim Saline Creek and Create a Corridor of Natural Bush land - Project No: 48986**  
**12/11/2004 – 12/11/2008**

**Amount allocated: \$20181.82 Funds Expended: \$20181.82 Funds remaining: \$0.00**



Salt scald before project started in 2004

This project carried out by the Martin family has been an overall success. The areas targeted have been turned from unproductive salt scalds riddled with spiny rush to productive pasture, plus creation of a bush corridor which is important for native biodiversity. Work included: installing 10km of fencing, removing spiny rush, and mass plantings of saltbush species,



Phil Martin with a line of healthy Rivermoore saltbush on the rehabilitated land February 2009

Rhagodia, swamp mallet, oil mallee and york gums which have all grown well. Other plantings of broombush and sheoaks were not so successful which was mainly due to drought and pests. Some of the fencing material was used to fence off two patches of native bush and then additional fencing was erected between them to create a corridor. Locally collected seed will be sown allowing the patches of bush to be joined.

**Beermullah Lake Project - Project No: 45147**

**Nov 2004 – April 2008**

**Amount allocated: \$9130.00 Funds Expended: \$9130.00 Funds remaining: \$0.00**

This project was carried out by the Barrett-Lennard family and all or most of the work was carried out. A total of five lakes (wetlands) were fenced off from surrounding farmland to exclude livestock access. Over 5km of electric fence was built requiring the use of a very large number of strainers post (~50) due to the circular nature of the lakes. The work has had the desired effect of not allowing stock access to the lakes and the native vegetation/ecosystems is returning to the lake edge and contributes to creating a “healthier” Swan Plain” chain of wetlands.

Protection rehabilitation and improved management of saline land, Maya. - Project No: 51401

July 2005 – to be finalized

Amount allocated: \$27,835.64 Funds Expended: \$17,123.82 Funds remaining: \$8,181.82.00

300 ha of unproductive saline land was fenced into blocks of 100 ha and direct seeded with saltbush. The established saltbush has resulted in reduced water in the top 1-2 m of the soil profile (less waterlogging) and the healthy foliage has reduced soil surface temperature so that there is less capillary rise of salt to the surface. There is greater vegetative cover of the soil, resulting in less wind erosion. Fencing into smaller units has improved grazing management and plant production. There has been a return of annual pastures.

The improved grazing potential of the land has allowed a carrying capacity of 3000 DSE, despite low rainfall years, with 75 % grazing on saltbush in conjunction with 400 ha of grass pastures. Running intermittently with the sheep are 45 breeder cows with calves. In the last 12 months, production has consisted of 800 sheep for meat, 50 bales of wool and 140 yearlings.

Lambing and calving percentages have been good, with sheep having good bone development, which has been maintained through the lean winters over the past two years. Shearers have commented on the good condition of the sheep and the wool produced on the farm. Tensile strength of the 54 bale wool clip per year has been good over the last 2 years.

Kim Diamond actively promotes the grazing potential of halophytes, and offers encouragement and advice to other landowners. He is often invited to speak impromptu at meetings and field days.

## 7.8 Gingin Expo 18th April 2009

The Moore Catchment Council packed up its display boards and NRM resources and headed down to the Gingin for the Expo, which this year was fraught with bad weather - thunder, lightning and downpours! Gladly this didn't keep all the crowds away and many people came and had a look at our display. Rachel Walmsley, Ingrid Krockenberger, John Longman, John Braid and Lawrie Short were all on hand to answer the public's questions and drum up support for the MCC. It was good to meet and talk to some of our members and also to make new acquaintances. Hopefully the weather will be more favourable next year..



John Longman and Ingrid Krockenberger setting up the display



## 7.9 Promising start for new Ledge Point Coast Care Group

The Moore Catchment Council continued its involvement with the Ledge point Coast Care Group by helping to organise a Beach Walk and Interpretation morning on 22nd November 2008. Local community members, weekend residents and representatives from NACC were present. The walk was to raise awareness of the environmental issues and problems on the beach front at Ledge Point including pedestrian access, erosion and vehicles, plus the best ways in which to fix them and manage them for the future.



Participants enjoy the morning beach stroll



Jan Richards (Ledge Point Group) and Chiara Danese (NACC) explain the issues present

The Moore Catchment Council assisted the Ledge Point Coastal Group with applying for a Coastwest grant for Stage 1 of their proposed rehabilitation plan. They were recently successful in obtaining \$28,320 and MCC will play a part of delivering the project.

Stage One of this project aims to:

1. Manage uncontrolled pedestrian traffic on the dunes at Key Biscayne Park using fencing and interpretive signage;
2. Address coastal degradation and erosion issues caused by this pedestrian traffic through rehabilitation, stabilization, and monitoring of coastal dune areas as well as controlling invasive flora and fauna;
3. Educate visitors and residents about the importance of healthy coastal ecosystems through construction of interpretive signage, workshops and field days; and
4. Work towards a broader plan that aims to provide a unique ecological, geological and cultural experience to future users, and plan for Stage Two of the project.

## 7.10 Moora Show – September 2008



The Moore Catchment Council and West Midlands Group joined forces to set up an educational and informative display at the Moora Show. The display was staffed by Jo Manning, Rachel Walmsley, Ingrid



Krockenberger and Geoff Erikson.

As Moora Show is organized as family event, a special feature of the day was the Kid's Natural Resources Management Quiz which had some busy little people enthusiastically looking at clues in photos to answer the questions and then receive their prize bag of NACC goodies. The marquee was visited by a wide array of people, from local farmers, residents and contractors, to tourists from as far afield as New Zealand, all wanting to chat about the NRM issues that have sparked their interest.



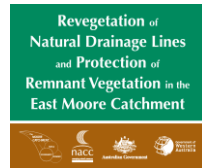
Jenna Brooker of the Dieback project was also on hand to answer dieback questions

The marquee was shared with Jenna Brooker from the Dieback Project, who offered to clean the boots of visitors to emphasize the importance of soil hygiene practices in *Phytophthora* dieback prevention, and a team from the Forest Products Commission promoting their incentive schemes and products. This provided a complementary mix of ideas and materials, making for a successful combined display.

The team had developed a 'Kids Quiz' which involved answering some questions regarding NRM for which they received a Prize Bag full of NACC goodies

## 7.11 Revegetation of Natural Drainage Lines and Protection of Remnant Vegetation in the East Moore Catchment Project

Project Manager – Lana Kelly; article by Ingrid Krockenberger



### Project aims

- increased capacity for regional, strategic, on-ground works by identifying priority areas from maps and information from Local Action Plans
- new landholders involved in Landcare
- high priority remnant vegetation in the catchment fenced and excluded from stock
- high priority natural drainage lines fenced and revegetated with native, local species and saltland species, to form links between remnants
- increased knowledge and awareness of fauna and flora species present in the East Moore Catchment through surveys to help with conservation efforts and to attract further funding
- co-operation and liaison with other organisations to develop management programs, and help with species identification and surveys
- an increase in the amount of free-hold land under a voluntary management agreement



### Key achievements

The key achievements of this project include:

- fencing 91 hectares of high priority remnant vegetation.
- fencing 136 hectares of high priority natural drainage lines.
- revegetating 19 hectares of high-priority natural drainage lines.

In total, 227 hectares has been protected through 15 Voluntary Conservation Agreements via 7 landholders. Nine flora surveys and 20 bird surveys were carried out to raise scientific knowledge of flora and fauna in the East Moore Catchment.

### On-Ground Works



Under the management agreements, landholders are responsible for weed control, firebreaks and maintenance in the fenced and revegetated sites. Landholders were given a monitoring and evaluation file to record change and development of the sites over a period of 10 years, through photos.

Sarah Mason receives a cheque from Project Officer Lana Kelly on completion of two revegetated creeklines at Carrah Farm, Calingiri (Photo credit Lana Kelly)

Mike Smith establishes a tagged photo point at newly fenced remnant vegetation at Benedictine Farm, New Norcia (Photo credit Lana Kelly)



Moore Catchment Council is looking forward to assessing progress at the project sites in the future. Funding will be sought to build on the project's achievements and to monitor flora, fauna and habitat values of the revegetated areas and protected remnants.

## Flora surveys

Flora surveys were conducted on four properties in 2007. Collected specimens were compiled into a herbarium for future reference during a workshop session at DEC in Jurien in November 2008. The herbarium is stored at Moore Catchment Council office. A summary of the survey is given in Table 1.

Over a hundred species were identified. The most common family was Myrtaceae represented by 24 species, 5 of which had greater than 50 individuals each, notably *Corymbia calophylla* (marri), *Calothamnus sanguineas* (silky-leaved blood flower), and *Melaleuca concreta* and *M. coronicarpa*. Also well represented with 19 species was the family Proteaceae, with species among the genera *Dryandra*, *Grevillea*, *Hakea* and *Synaphea* each having greater than 50 individuals.

Table 1. Summary of field data, prior to formal identification.

Family	number of species	most represented genus*
Anthericaceae	1	
Asteraceae	1	<i>Lawrencella</i>
Casuarinaceae	2	<i>Allocasuarina</i>
Chenopodiaceae	3	(samphire)
Colchicaceae	1	
Cupressaceae	2	<i>Actinostrobus</i>
Cyperaceae	5	<i>Lepidosperma</i>
Dilleniaceae	6	<i>Hibbertia</i>
Droseraceae	5	<i>Drosera</i>
Epacridaceae	2	
Goodeniaceae	3	<i>Lechenaultia</i>
Haemodoraceae	5	<i>Conostylis, Haeodorum</i>
Haloragaceae	1	<i>Gliischrocaryon</i>
Liliaceae	4	
Loranthaceae	1	
Mimosaceae	5	<i>Acacia</i>
Myrtaceae	24	<i>Calothamnus, Corymbia, Eucalyptus, Kunzea, Melaleuca</i>
Papilionaceae	12	<i>Daviesia</i>
Poaceae	3	
Proteaceae	19	<i>Dryandra, Grevillea, Hakea, Synaphea</i>
Rutaceae	1	
Solanaceae	1	
Stylidiaceae	1	

\* for which greater than 50 individuals were surveyed



## Discovery of a New Species

An unexpected and exciting result of flora surveys in 2007 was the discovery of a new plant species from the Elaeocarpaceae family. An article on the new species was published in the Western Australian Herbarium journal *Nuytsia*.



New species *Tetratheca plumosa* (Photo credit Lana Kelly)

Excerpt from the *Nuytsia* article: “*Tetratheca plumosa* was discovered during a vegetation survey of private land near New Norcia by Moore Catchment Council (MCC) and Department of Environment and Conservation (DEC) personnel in 2007. The specimen, collected from private property, was originally referred to *T. similis* Joy Thomps. due to its superficial similarity to that species, but was identified as an undescribed species in 2008 ...” (p 9)

Butcher, R. (2009). *Tetratheca plumosa* (Elaeocarpaceae), a new species closely allied to *Tetratheca similis* from south-west Western Australia. *Nuytsia*, **19**(1), 9-16.

(access at: <http://www.dec.wa.gov.au/images/stories/nature/science/nuytsia/19/1/009-016.pdf>)

## Bird Surveys

Andrew Huggett from InSight Ecology conducted bird surveys on five properties in the project area, comparing the bird habitat value of planted native vegetation (revegetation) with remnant shrubland and woodland. A total of 326 individual birds and 36 species were recorded during the surveys. The revegetated areas supported greater bird numbers but the remnant areas supported more species.

Greater diversity of species is possible in the remnant areas due to greater diversity in foraging, nesting and refuge opportunities, compared to the younger, narrower and structurally simplistic revegetation. The remnants fenced off from stock were richer in bird species than those that are not. Similarly, more established and structurally diverse revegetation sites had greater bird species diversity than younger, less stratified revegetation. Almost half the bird species were observed breeding during the survey, mainly in the remnants and older planted vegetation which provided suitable nesting sites.

The most abundant birds were ubiquitous wheatbelt species, including Brown Honeyeater, Weebill, Australian Ringneck and Singing Honeyeater. Several birds of conservation significance were observed during the survey – Carnaby’s Black-Cockatoo, Red-Capped Parrot, Splendid Fairy Wren, Western Gerygone, Western Thornbill and Western Spinebill.

More than 20 additional birds of conservation significance have been recorded or can be expected to occur in the study area. Many of these are members of the ‘next wave’ of declining ground- and shrub-foraging insectivore species predicted to become extinct locally. Andrew emphasises the importance of protecting existing populations of threatened and declining avifauna and their habitat.

A priority conservation action would be to increase the size and improve the condition and connectivity of remnant vegetation in the project area. Andrew suggests that revegetation efforts need to increase the width and length of existing key remnants to provide connectivity between ridges,

slopes and valley floors. ‘Stepping stone’ plantings of blocks of local species are needed, as well as increased structural complexity of existing planted zones to improve breeding habitat value.

**More information can be found in:**

InSight Ecology (2008). *A Survey of Birds in Planted and Remnant Native Vegetation around Calingiri and New Norcia, East Moore Catchment, WA*. Report by InSight Ecology for Moore Catchment Council.



Revegetation site with structural complexity achieved through a mix of plant species, providing good habitat value for birds.

(Photo credit Andrew Huggett)

Remnant vegetation with reduced habitat value due to removal and damage to understorey vegetation by cattle grazing.

(Photo credit Andrew Huggett)



Valuable nesting hollow in *Eucalyptus wandoo*. (Photo credit Andrew Huggett)

Amount Received as at 30 <sup>th</sup> June 2009	268,625.60
Amount expended as at 30 <sup>th</sup> June 2009	167,166.74
Funds returned to NACC	101,458.86
Balance of funds in project as at 30 <sup>th</sup> June 2009	0.00

## 7.12 NACC and MCC Staff

### NACC Incentives

The MCC NRMO's Rachel Walmsley and Ingrid Krockenberger have been busy in the last year delivering NACC incentives. Part of the NRMO's role has been to deliver the NACC incentive program – Rivercare, Wetland Protection, Oil Mallee, Native Vegetation, MCC has helped 6 landholders fence off 25 kilometers of the Moore River tributaries, revegetate 63 hectares of land adjacent to the river, 1 landholder fence off 1 wetland with 5.5 hectares of revegetation occurring and help 5 landholders plant 66.5 hectares of Oil Mallees

NRMO Project funding IP2 Project ID 051NRMO-10

Amount Received as at 30 <sup>th</sup> June 2009	471,047.00
Amount expended as at 30 <sup>th</sup> June 2009	385,041.00
Balance of funds in project as at 30 <sup>th</sup> June 2009	86,006.00

## 7.13 Increased Adoption of Sustainable Brushwood Production

Caring for Our Country funding \$224,091

The brushwood project began with an expression of interest being developed with the Moore Catchment Council in 2008. The expressions of interest opened in 2008 allowing for land managers to submit applications. The orders were submitted to the nurseries. This year has been a difficult year for the growth of seedlings. However, the seedlings are of good quality and reached the height in time for the planting season to commence.

The project is for 500,000 seedlings to be



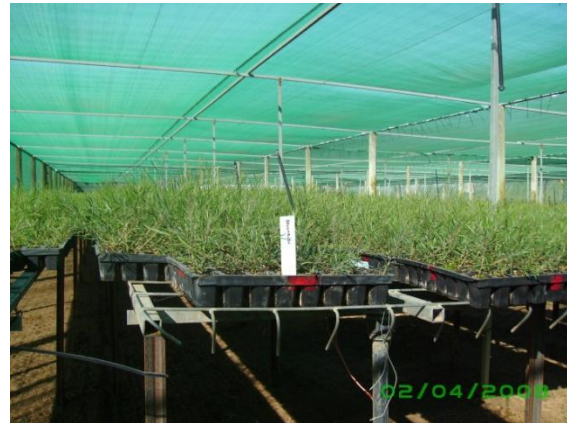
Looking for seed with Tim Emmott

planted in the Moore Catchment

Region. The applications were received and the seedlings allocated to the land managers.

The seedling agreement was formed and each landowner has completed the contract. Each site will be visited to photograph, take GPS readings and discuss with the landowner their concerns, success or other issues.

The MCC hosted a brushwood field day in Miling on 18 May as part of the 'Increased Adoption of Sustainable Brushwood Production' project. Helen Job from Avongro was on hand to deliver an interesting and informative presentation, and then answer questions.



Kalannie Tree Supplies –growing of brushwood seedlings



Although attendance wasn't as high as expected, the small group had some very useful discussion indeed.

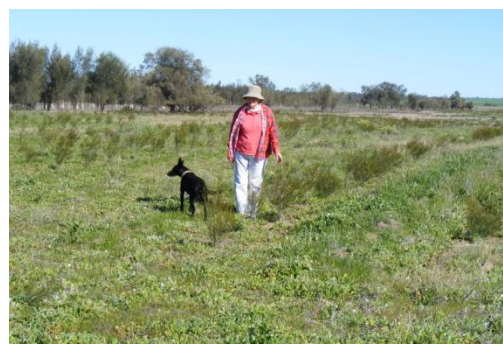
Some of the messages from the day were:

- the brushwood industry is on the verge of taking off and becoming fully self-sustaining;
- a grower cooperative is needed for the industry to become coordinated (yet flexible) between growers,
- harvesting and the processing facility (Helen says there should be cell groups within each region to address local issues);
- as yet, supply does not meet demand for the product;
- a mechanical harvester and fence panel packer have been developed in SA and will be available in WA;
- there is potential for other products from brushwood (eg. oil, bio fuel);
- the growth potential of brushwood is reasonably well-known but this is being further investigated by a CSIRO project which models growth according to site conditions (APSim) and can determine the optimal mix of farm enterprise and management to ensure resilience and sustainability into the future of changing climate..



Field day held at Coorow. 16 people attended. The outcomes from the trial harvest between Southern Brook Catchment and Bowman Brush was shared. The suggested way forward to forming a brushwood grower group was tabled. It was decided further feed back is needed from all growers and this happening by way of flyer with the membership subscription.

I am in the process of visiting and talking with the landowners who have ordered the seedlings in this year programme. I note that there is a degree of enthusiasm amongst the brushwood growers to become a grower group in order that a strong network of people can be established. It is expected that the grower group will become a reality in a few months.



Dale Field Day

Amount Received as at 30 <sup>th</sup> June 2009	\$224,091.91
Amount expended as at 30 <sup>th</sup> June 2009	\$105,194.05
Balance of funds in project as at 30 <sup>th</sup> June 2009	\$118,896.86

Helen Job – Co-ordinator



## 7.14 **Grants**

### **Granted:**

#### Increased adoption of sustainable brushwood production

Jan 09 - Dec 09 ID OG083957

Funding has been approved for an extension of the successful Brushwood Industry Development on Saline Land Project. The Federal Government has made \$224,000 available for the Increased Adoption of Sustainable Brushwood Production Project, under the highly contested Caring For Our Country Open Grants scheme. Moore Catchment Council was among very few Western Australian projects to receive funding. The total amount allocated throughout Australia was \$28.5 million, with Western Australia receiving \$2.8 million.

The Adoption of Sustainable Brushwood Production Project has been managed by Project Officer Georgie Troup and has planted over 1.25 million Melaleucas throughout the Northern Agricultural Region since 2006. Melaleucas planted by the project are destined for the brushwood fencing market.

Brushwood production offers farmers diversification of farming enterprise and economic return on previously unproductive agricultural land affected by salinity. There are many additional benefits associated with brushwood plantations including amelioration of land affected by salinity and protection of valuable cropping land. Sustainable production of brushwood in plantations ensures the protection of naturally occurring stands of Melaleuca in remnant vegetation. The harvested plants have the ability to re-sprout, providing a renewable resource.

Caring for our Country Open Grants scheme - \$224,091'

#### Caring for Our Country funds more saltbush

The Moore Catchment Council (MCC) has been celebrating the recent success of another Federal Government Caring for Our Country (CFOC) project application being granted which is again in partnership with the Moora-Miling Pasture Improvement Group (MMPIG). The project 'Productive Saltbush Pastures to Combat Wind Erosion in the Eastern Moore River Catchment' was awarded the full amount \$96,500 asked for and will be a continuation of the successful 2007/08 NLP project 'Creating Productive Saltbush Pastures on Saline Land' which saw 130,000 saltbush seedlings being planted in the Moore river catchment east of Moora. The new project will see an additional 144,000 subsidised saltbush seedlings being planted by members of the MMPIG in 2010, which aims to create an extra fodder crop for stock – especially in the autumn food gap, help reduce wind and water erosion of land adjacent to the Moore River, as well as helping to increase awareness of this farming method and how to successfully integrate it into the farm. The ultimate aim is to ensure future agricultural sustainability for this region and beyond, with saltbush utilization playing a major role in the face of a changing climate.