

April—July 2004



Yarra Yarra Catchment Management Group QUARTERLY NEWSLETTER



\$2 million to tackle salinity and water quality in Western Australia

Tackling salinity and improving water quality in Western Australia will be the focus of a \$2 million investment by the Australian and Western Australian governments, funded under the *National Action Plan for Salinity and Water Quality*.

The Yarra Yarra Catchment Management Group was successful in receiving \$268,400 for a feasibility study on Yarra Yarra to demonstrate catchment governance and planning concepts.

This project will include the following:

1. Soil Mapping

Cooperative Research Centre for Landscape Environments and Minerals Exploration (CRC LEME) are supporting our proposal. CRC LEME plan to provide technical input including the analysis of the airborne geophysical data and to help in the ground truthing to create soil maps from the airborne radiometric data. The magnetic data is especially significant to our project as the magnetic data will indicate rock formations that could be an impediment to drainage development.

2. Ecological Survey

Ecologist, Georgina Nielssen of Perth based company Regeneration Technology Pty Ltd, has started work on two of the focus drainage points in the Yarra Yarra catchment - Burakin and Goodlands. Existing drains have been mapped, and soil and water samples have been taken to analyse any changes that may have taken place since the drains were constructed.

Georgina will be conducting an environmental impact assessment for all 4 proposed deep drains for saline drainage in the Yarra Yarra catchment. Once the route of the drains has been identified the entire length of the proposed drain will be ground truthed. Water from adjacent bores will be sampled to determine the ionic concentration of major ions, pH and salinity.

3. Bore Program

Water level and water quality readings from bore holes will be used to ground truth the Rapid Catchment Appraisal just completed by the Department of Agriculture. Soil data extracted from the pits and the drilling process will be used to establish design criteria and best practise standards for earth works, salt land pasture establishment, revegetation and other rehabilitation activities to be applied to

proposed projects along the valley floors. A series of cased bores will be used for ongoing monitoring of the established water table profile.

4. Drainage Program

The natural watercourse is being defined and deepened from the top of the catchment, through valley floor to the lake system. The shallow channel is 37km in total and will be constructed using an excavator fitted with a laser. The drain will be 4m wide. Leveed Deep Drains will be constructed to the areas of high water table at the break of slope and adjacent to the creek in the low-lying areas. Grassed waterways will be maintained alongside Leveed Deep Drains where required.

5. Digital elevation models

The digital elevation models that have been provided for us by the Land Monitor Group through DLI are not precise enough to give satisfactory levels for the particularly flat terrain in which we have to work. As levels have a vital impact on the delivery of water we will need to develop our own DEM to suit our own needs. We estimate that probably 20 - 30% of each Zone may need precise levelling. Dene Solomon will be surveying the catchment and we have hired DGPS and base station instrumentation to assist him.

Release of the Regional Strategy for Public Comment

The Northern Agricultural Catchments Council (NACC) is the organisation responsible for natural resource management (NRM) in our region.

Put simply, NACC is concerned with how we manage our natural resources the water, the land, and everything living within it - now and into the future.

NACC has prepared a regional strategy to tackle this issue. The strategy will be a blueprint for future investment in NRM for

the region.

Once the strategy is accredited, NACC will also be the key body through which investment for NRM from the Australian and Western Australian governments will flow.

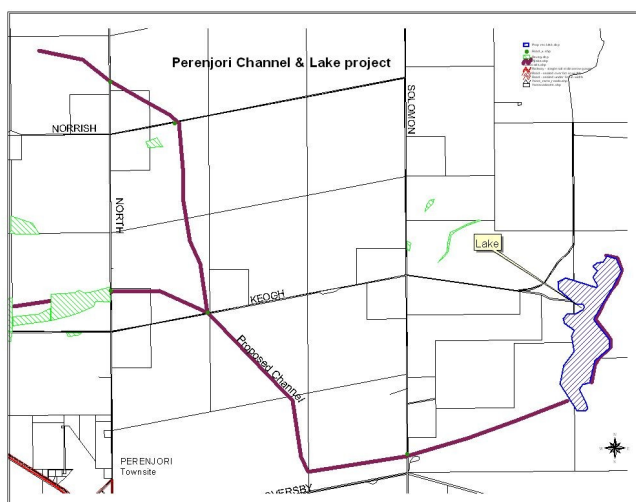
YYCMG employees have been busy including all issues you consider important in the strategy. There was a Fast and Efficient Review done by all of NACC employees involved and a select

group from the State and Commonwealth.

NOW ITS YOUR TURN - The draft will be going out for community comment on the 2nd of August and a strategy information day will be held on the 25th of August from 2-4pm at the YYCMG office in Perenjori after the YYCMG meeting (10am).

Please come along as the 25th of August is your last chance to have a say in the write up before the strategy is sent for accreditation.

Recreation Project all set for Perenjori



Constructing a drain

The YYCMG application to establish a drainage and recreation lake has successfully been granted \$137,450 from the Australian Government's National Landcare Program.

This involves the restoration of a lake in Perenjori, providing a recreational facility for the surrounding communities, an outlet for excess water in high rainfall years and the availabil-

ity of a water source for native fauna.

The project aims to increase the biodiversity in the lake area by providing a permanent water source and improving the surrounding vegetation.

The 17 km drain, will demonstrate a best practice method in addressing the spread of valley floor salinity and disposal of drainage water, an issue faced by all areas in the Yarra Yarra sub-region.

A meeting last week finalised the proposed line for the Perenjori drain. The farmers who attended made some good suggestions and were happy with the progression of the project. This drain will go through 6 farms, draining into the recreational and scientific lake.

The construction of drains will begin soon.

Mid West REGIONAL DEVELOPMENT SCHEME 2004/2005

OBJECTIVES

The primary objective of this Scheme is to improve the economic and social development of regional Western Australia through funding projects that will assist in attracting investment and increasing jobs in the Mid West region.

WHO CAN APPLY

The Scheme is targeted at providing financial assistance to regionally based organisations. Eligible applicants may include local government, voluntary organisations, business groups, educational institutions, philanthropic foundations and community organisations. State government agencies may apply but projects deemed to be within their core business functions will not be supported.

For more information:

Contact Carolyn Fewster on
Tel: (08) 9921 0711

Fax: (08) 9921 0707

YYCMG Meeting - 25th of August at
the Perenjori YYCMG Office



Gordon Reid Drilling Project

"The Gordon Reid Drilling Project is funded with \$66,000 by Lotterywest".

The Gordon Reid Drilling Project is funded with \$66,000 by Lotterywest.

This project will develop a process that will accurately reproduce a profile of water tables and provide water quality information from land immediately adjacent to the arterial drainage lines in the Yarra

Yarra Catchment basin.

Kevin Howarth has begun drilling bores throughout the Perenjori and Morawa shires. The water level and quality readings from bore holes will be used to ground truth the Rapid Catchment Appraisal completed by the Dept of Ag.

A series of cased bores will be

used for ongoing monitoring of the established water table profile.

This "whole catchment project" precedes the rehabilitation of the arterial drainage systems within the Yarra Yarra Basin, the Feasibility study.

Envirofunds—Winderosion Project

In July 2003 the YYCMG received \$30,000 of funding through the “Envirofunds” scheme to rehabilitate areas of land that have been chronically affected by wind erosion.

Maps / satellite imagery of the Yarra Yarra Region show the areas worst affected during the 2001 and 2002 summers. The sites were selected by their severity and farmers were approached to ascertain their interest in participating in the project.

Four sites, Kalannie, Canna, West Three Springs and North Perenjori were mapped and then visited to determine the line the trees would follow to best reduce the impact of wind on the land.

These sites will have a total of 28000 trees and 2000 saltbush planted with 7 km of fencing.

Planting of saltbush, York Gum, Broombush, Tamma, Black Tamma, Cowcowing Mallee, Oil Mallee and Bottlebrush is being undertaken now

by the farmers and YYCMG employees.

Viewing of the satellite maps during the drought years and site visits to the rehabilitated wind erosion sits can be organised by calling the YYCMG Office.

“YYCMG received \$30,000 of funding through the “Envirofunds” scheme to rehabilitate areas of land that have been chronically affected by

Trialling Broombush on Perenjori Farms

YYCMG is working with the Moore Catchment Council to trial *Melaleuca uncinata*, (Broombush) on saline land in the Northern Agricultural Region. Broombush plantations established on saline land could provide economic return.

The trials will be grown on the margins and within areas of secondary salinisation that po-

tentially could be commercial cropping land.

The sites north of Perenjori and in the Moore region will be monitored to determine growth and survival rates.

These trials have the potential to determine growth parameters of differing establishment techniques, employment creation opportunities, the effect of

a new farm forestry activity and the impact on traditional farming practices, effect of zonal vegetation cropping on secondary salinisation and whether broombush is a realistic tool in combating salinity.

It is very exciting for farmers in this region to be part of this trial and see the results first hand.



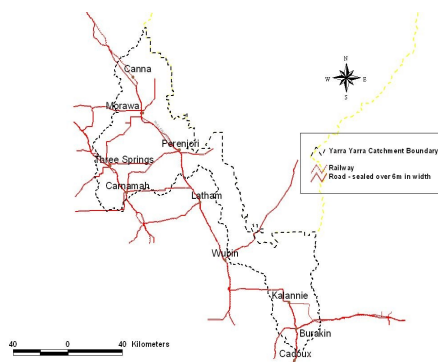
Broombush Plantation

NACC Display at the Mingenew Expo

The Mingenew Lions Midwest Expo on the 16th and 17th of September. YYCMG will be part of an exciting and informative NACC display at the Mingenew Expo. It is a great opportunity to visit the display and meet NRMOs from different subregions and talk about the implementation of the strategy and the effect it will have on **YOUR future**.

The YYCMG Perenjori Office is well equipped to create maps to your specifications. Geographical Information Systems (GIS), aerial photography, contours, streamlines, lakes and roads allow us to produce high quality, colour farm maps with the details that you require such as arable areas and paddock

Mapping by YYCMG



sizes. We have the facilities to print maps up to A1 (610mm x 850mm). If you are interested please contact Cindy on 99731425 or yycmg@westnet.com.au.

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The Yarra Yarra Group is a professional incorporated Catchment Management Group formed in 1997 by community members who wished to enhance the economic environmental and social well being of the Yarra Yarra Catchment Basin. The Yarra Yarra Basin is one of four

sub-regions of the Northern Agricultural Region.

Movement at YYCMG

The new voice on the phone at Perenjori is Cindy Walker. Originally from Esperance, Cindy studied Natural Resource Management with Honours at UWA before taking a year off to travel Australia. Cindy has taken on Dene's position of full-time Local Natural Resource Management Officer based at the Perenjori office.

Kevin Howarth has been employed as a full time drilling operator for the Feasibility study. Some of you may have had the pleasure of Kevin drilling at your farm or heard about the drilling at the schools. If not, and you would like to be monitoring your groundwater, please call the YYCMG Perenjori office

Remnant Vegetation Surveys on Farms

Do you have a piece of remnant vegetation that you would like surveyed with a CALM Accredited survey to determine the species living within it, the Conservation Value and the Condition Rating for FREE? Contact: Melanie Stevens (08) 96662140 Cindy Walker (08) 99731425

Do YOU want to learn how to use Catchman?

The Yarra Yarra Catchment Management Group is holding training sessions in Catchman Catchment Management software for those who already have the program or who will be using it in the near future.

"Catchman" Catchment Management software was developed by Perth based company Rokit Science in consultation with the Yarra Yarra Catchment Management Group. The main aim of the Catchman software is to put into the hands of farmers and catchment managers state-of-the-art GIS software so that farm-based drainage and vegetation plans can be created taking into account the requirements for the whole sub-catchment.

This program is created using Esri software called "Map Objects" and is designed to provide:

- On screen viewing and plotting of the GIS Database, allowing the creation of maps suitable as decision support aids addressing the revegetation, drain and bank construction programs within the sub-catchment.
- A robust data base environment for the input, storage, extraction, update and manipulation of key sub-catchment spatial data.
- The integration of existing base datasets, software tools and methodologies currently in use within the YYCMG.

- A simple single entry point graphical user interface to this system and its tools.
- A system that can be extended in the future to allow stakeholders within the community to access some functions remotely.
- An easy link with the Regional Information Centre that will facilitate the upgrade of the database by farmers' capturing their groundwork and transmitting them via e-mail back to the Regional Information Centre.

If you are interested in receiving Catchman training or know of anyone who would be interested please contact Melanie Stevens yycmg_kalannie@westnet.com.au or 9666 2140.

Envirofunds

In the first round of Envirofunds for 2004 - 2005 we applied for funding for three projects.

★The first application will fund **fencing off and planting trees in a saline and eroded creekline on a farm north of Perenjori**. We applied for approximately \$10,000 to assist with this project.

★On another area of saline land west of Perenjori **saltbush trials** will be conducted to determine alternative rehabilitation species to oldman and river saltbush. This has the potential to increase the diversity of species used in the rehabilitation of saline land. At this site a less salt affected area will be planted to species found in a York Gum flat to **trial the replanting of a local vegetation association** to maintain diversity of species in the area, protect the gene pools and increase the biodiversity of the site. The soil will be mounded before any replanting takes place to **trial the effect of mounding on species survival rate**. Approximately \$25000 will fund the trials of this project.

★The last project will fund NRM Officers **visiting schools within the Yarra Yarra Catchment to increase the awareness of Natural Resource Management issues of the region**. This project will be in conjunction with the feasibility study including bore drilling and remnant vegetation identification. We hope this will be a progressive project covering different NRM issues as we receive funding.

EASY \$\$\$\$ The next round of applications opens in November. If you have any remnant vegetation you are interested in fencing off, or saline or eroded areas that could be rehabilitated, please call or come in and talk about your next application. **It is easy to apply for Envirofunds. We will complete the application for you so no work is involved from your part until the funding is successful.**