

Aug - Dec 2004



Yarra Yarra Catchment Management Group QUARTERLY NEWSLETTER



Developing the Environmental Skills of Primary and Secondary Students in the Yarra Yarra Catchment

In the first round of Envirofunds for 2004 - 2005 we were successful in receiving funding for NRM Officers to visit schools within the Yarra Yarra Catchment.

The aim of this project is to increase the awareness of some of the Natural Resource Management issues within the Yarra Yarra Catchment.

This project will work 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.

We look forward to working with the following schools in this project: Carnamah, Coorow, Latham, Kalannie, Morawa, Perenjori and Three Springs.

Are YOU interested in:

- * Fencing remnant vegetation
- * Rehabilitating saline land
- * Providing birds and animals with a corridor between two remnants
- * Protecting threatened species
- * Planting a windbreak to reduce erosion

If you would like to apply for funding for any of these areas, please contact Cindy Walker on 9973 1425 or look at the Envirofunds website:

www.nht.gov.au/envirofund

In the next round of funding YYCMG will be assisting with the following applications:

- Revegetation of the Green Lake
- Fencing remnant vegetation to protect rare orchids
- Fencing and rehabilitation of saline land x 3
- Fencing remnant vegetation x 6
- Fencing to preserve remnant vegetation for threatened species x 2



Next round of Envirofunds close 18th of February 2005

1st National Salinity Engineering Conference—Nov 2004

The conference brought together scientists, engineers, managers, landowners and farmers to share the current understanding of the salinity problems of land and water and to provide opportunities to examine and discuss technical and engineering options.

MAJOR THEMES

Deep and Subsurface Drains - Design and Effectiveness

How to reduce the salt loads from drains
The need for assessing drain effectiveness
Analysis of drain designs—what has worked and where

Pt of Interest - Disposal of acidic

groundwater seems to be the biggest stumbling block in the disposal of drainage water

Groundwater Pumping

Salt interception schemes to lower stream salinity

Solar power and windmills to pump saline water

Borefield design for salt interception schemes

Pt of Interest - Iron bacteria blocking up pumps and reducing their effectiveness by 50 %

Wastewater Reuse

Salt and mineral extraction may be profitable with highly saline water

Pt of Interest - A benefit of drains over pumping is they produce smaller quantities of water that needs to be disposed

Biodiversity

Downstream impacts of acid and highly saline groundwater

Salinity Mapping/ Tools Available

Pt of Interest - High resolution fast salinity sampling towed behind a boat taking measurements every 7 - 10 m in the River Murray

Recreation Project Construction starting in February

THE MONEY IS IN THE BANK

The Australian Government's National Landcare Program have given YYCMG the green light to begin works on the Perenjori Recreation Project.

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

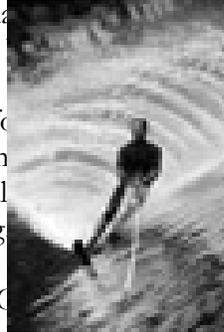
The 17 km drain, will demonstrate a best practice method in addressing the spread of valley floor salinity and disposal of drainage water, an issue faced by all areas in the Yarra Yarra subregion.

Dene Solomon is managing the project and doing a great job

completing the Notice of Intent to Drain. It is expected to take 3 months before the Notice of Intent is approved by the Department of Agriculture.

During the 3 month period Dene will be surveying the area to be drained and finalising the plan. Perenjori CEO, Mr Thompson.

This is good news for skiers as the permanent end of the drain will include water-skiing look forward to the completed by next C



Perenjori School: Recycling as a Fundraiser

The Perenjori Primary School P & C has embarked on a recycling fundraiser. At the recycling depot you can put your used cans, newspapers and milk bottles into woolpacks.

The money raised will be put towards new playground equipment. This is a fantastic, environmentally friendly way to raise money for the primary school. For more information, please contact Dawn Solomon, Perenjori P & C President on 9973 1162.

The next YYCMG meeting - February 2005

YYCMG Expressions of Interest and the NACC Strategy

Catchment Salinity Control/Coordinating Catchment Rehabilitation/Further Development of the Oil Mallee Industry/Viable options for broadacre agriculture/Inland Saline Aquaculture

YYCMG submitted Expressions of Interest (EOIs) to be considered for the Investment Plan Component of the NACC Natural Resource Management Stage. The details of the EOIs are as follow:

11 Catchment Rehabilitation Programs were submitted, **targeting salinity control at a sub-catchment scale** through water course reclamation and landscape management.

An overarching EOI was submitted that will **coordinate and support the onground works** involved in the rehabilitation programs of all 11 subcatchments.

The development of incentives to

revegetate by **establishing a commercially successful Oil Mallee Industry** is an EOI that will increase the existing mallee resource and refine the harvesting and processing technologies.

An EOI YYCMG has submitted, **targeting areas of low rainfall and high salinity, will determine the viability of options available to broadacre agriculture.**

Inland Saline Aquaculture was an EOI submitted by YYCMG to again, **investigate the options for maximising the use of saline water** within the Northern Agricultural Region.

Over 120 EOIs were submitted and a panel has reviewed them, giving each a rating to assist the development of the Investment Plan. A Technical Assessment Panel is currently reviewing the EOIs to determine their workability.

NACC has employed an Investment Planning Coordinator who begins in January, developing the Investment Plan. We will be notified if the projects have been successful in approximately February.

If projects are accepted they will then be re-written to include more detail.

Investigating Subsurface Drainage and Paleochannels

The National Landcare Program is a longstanding Department of Agriculture, Fisheries and Forestry (DAFF) Project which supports the landcare movement and the sustainable use and management of natural resources.

The NLP has been highly effective in encouraging farmers to adopt sustainable management practices, and improve their productivity, profitability and the condition of their natural resources, both on and off farms.

For the 2004 Round, **YYCMG submitted 2 NLP applications.** The first is to **evaluate an enclosed sub surface (perforated pipe) drainage system as an alternative engineering option for managing**

saline land.

The effectiveness of enclosed subsurface drains as a viable and sustainable engineering option for managing saline land will be evaluated by linking and comparing similar studies in other areas to the results of this project.

This will aid decision making of stakeholders in the Northern Agricultural Region for reclaiming saline affected land and reducing the spread of salinity in the future.

The second project will **fill the knowledge gap that currently exists in regard to information on paleochannels in the Yarra Yarra Catchment.**

This will help to address the following issues:

Is another regional water table dominated by paleo drainage systems?

Is there any leakage from the surface water held in the lakes into paleo systems?

Is there any lateral movement of groundwater towards the bottom end of the catchment at Carnamah?

Is there a significant aquifer in the system to support the desalination of the enhancement of gypsum mining and agriculture?

YYCMG will be notified in the next few weeks as to the outcomes of these projects.

YYCMG's Investment Plan Advertising Brochure

Max Hudson and Melanie Stevens have put together an 8 page brochure outlining the "Case for Yarra Yarra". This is an informative document promoting the Yarra Yarra initiative. It details the resource assessment aspects of the feasibility study, and how they align with the NACC strategy. It shows our monitoring and evaluation component with photos and examples of the bore drilling

rig and data collection. It also includes information about the design of the proposed main drainage lines throughout the 11 management zones, and background on the Yarra Yarra Regional Organisation of Councils. This has been distributed to government personnel and the managers of relevant environmental departments. It is available for downloading on the YYCMG website.

Feasibility Study

The ecologist's report has been completed by Regeneration Technology Pty Ltd. Five deep drains were targeted for this study, investigating the condition of the vegetation, results of soil and water samples and the inclusion of bore monitoring data undertaken by YYCMG.

In brief, the ecologist's report found considerable variations between the volumes of water and the water

quality between the drains. The salinity of all drainage water is within a similar range to that of the primary receiving wetlands.

An area of concern was the drainage water was of a higher acidity than the receiving wetlands, but the wetland soils have the capacity to buffer the pH of the discharge water. This report can be downloaded from the website.

Jibberding Project

The Jibberding project has been completed and an ecologists report by Regeneration Technology Pty Ltd illustrates that the results are very positive. This project demonstrates a working integrated drainage system that is consistent with a larger plan to manage salinity in the Yarra Yarra Catchment. The ecologist states that the project has been successful at removing the water and it is unlikely the flooding will occur again. YYCMG will be applying for Envirofunds in Round 6 to revegetate Green Lake to complete the project.

All the Staff and Committee of the Yarra Yarra Catchment Management Group would like to wish you a Very MERRY CHRISTMAS and HAPPY NEW Y



Yarra Yarra Catchment Management Group QUARTERLY NEWSLETTER

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 Natural Resource Management Sub-Regions in the Northern Agricultural Region.

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Farewells at YYCMG

Melanie Stevens has been a valued Natural resource Management Officer at YYCMG for 2 years. Sadly, she has resigned from this position but may return and work for short periods assisting with Yarra Yarra projects. We will miss Melanie's enthusiasm and friendly nature.

We wish Melanie all the best for the future.

Kevin Howarth has been employed as a full time drilling operator for the Feasibility study for the last 6 months. He has achieved a lot within this time, drilling a total of 169 bores throughout the Yarra Yarra Catchment. Kevin and Cassie, with their children, are setting off to travel around Australia next year and we wish them safe and happy travels.

Peter Whale, based in the Three Springs Ag Department, has been the senior Natural Resource Management Officer for YYCMG for 18 months. Peter has made a huge contribution to YYCMG projects and funding applications. His knowledge and expertise will be missed within the Yarra Yarra Catchment Management Group and from the NRM Network.

Catchman Training How it Benefits YOU

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 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 would like to purchase a copy, please contact Cindy Walker yycmg@westnet.com.au or 9973 1425.

2 full time positions

Natural Resource Management Officer

Position involves resource assessment and data collection for catchment rehabilitation. Strong focus on field work. Degree in Environmental Science, Natural Resource Management or similar an advantage, database and GIS skills preferable. Previous experience in a related field is desirable. Salary \$40 - \$50K depending on experience and qualifications.

GIS / Database Analyst

Position involves database design and management, including coordination of data collection from +100 monitoring sites. Competency in Arc View and MS Access essential. Must be willing to provide GIS help / support to other users of the Groups custom built catchment management software. Opportunity for input into software development. Salary package around \$50 K.

Full time positions based in Kalannie. For job description and selection criteria:

www.yarrayarracatchment.asn.au or email

yycmg@westnet.com.au

Enquiries: Max Hudson (Project Manager) ph 9667 1021 or

Cindy Walker (NRMO) ph 9973 1425

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