

# WaterWheel

## National Program for Irrigation Research and Development

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### • Welcome

With this issue we bring you the fifth research supplement to keep you up to date with R&D developments from the National Program for Irrigation Research and Development (NPIRD).

In WaterWheel 9 we particularly focus on educational issues for irrigators. A study commissioned by NPIRD looks at educational issues that need to be addressed to equip irrigators to deal better with the 21st century. We also report on a two-day forum initiated by the Irrigation Association of Australia (IAA) to begin the process of improving educational opportunities for irrigators.

Details of IAA's new publication outlining details of rural and urban irrigation courses are given on page five in this newsletter.

There are a number of new projects recently underway, following our theme of water-use efficiency. We also are pursuing the idea of benchmarking as a practical and manageable tool for improving practice in our industry.

We bring you some information about the results of the recent survey which asked a random selection of readers their preferred ways of receiving information about the program.

The Rural Industries Research and Development Corporation has produced a useful book on the Internet for Australian farmers. From our survey results, many readers are interested in various forms of electronic information, and could find the book of interest. See page four for more details.

*Sally Berridge,*  
Editor



**Land & Water Resources**  
Research & Development Corporation

This publication is managed by the Land and Water Resources Research and Development Corporation (LWRRDC), GPO Box 2182, Canberra ACT 2601.

*LWRRDC's mission is to provide national leadership in utilising R&D to improve the long-term productive capacity, sustainable use, management and conservation of Australia's land, water and vegetation resources. The Corporation will establish directed, integrated and focused programs where there is clear justification for additional public funding to expand or enhance the contribution of R&D to sustainable management of natural resources.*

LWRRDC's Home Page is: [www.lwrrdc.gov.au](http://www.lwrrdc.gov.au)

## • *From the Coordinator's desk*

Many readers will be aware that Noel Dawson recently resigned as Program Coordinator. I was appointed to the program in May to replace Noel and to ensure that NPIRD continues to meet the R&D challenges facing our industry.

I would like to take this opportunity to thank the NPIRD Management Committee for supporting my interest in this position. I must also thank Noel for his invaluable help during this transition phase. Fortunately, Noel's expertise and immaculate record keeping has made the transition relatively painless.

For those readers that do not know me, I was previously employed for four years as CEO of the Murrumbidgee Irrigation Area (MIA) Horticultural Council in Griffith, NSW. The Council is the peak body representing the interests of horticultural families in the MIA, and deals mainly with land and water resource management issues. This position has given me a thorough grounding in water policy, supply and drainage management, and in research and development.

NPIRD has a number of important tasks to complete over the next twelve months. There is, of course, a suite of excellent projects currently running which will require support and review.

In addition, NPIRD is about to enter a new funding round and therefore a review of the program is required. Planning for this review has commenced recently. Also, we need to set our new directions.

The program review and setting of new priorities will involve widespread consultation with all key stakeholder groups, and will include industry and government representatives from those States that currently do not contribute financially to the program.

The aims of the review are therefore not only to secure current support but also to broaden our support base so that the program is truly national in its focus.

During the review process numerous opportunities will be provided for stakeholders to comment on the performance of the program and to give suggestions for its future direction.

More information will be made available when the Management Committee has finalised its plans. Our aim is to complete the consultation phase by November 1998 for consideration of the program by the LWRRDC Board in December 1998.

My contact details are provided on the back page of this newsletter. Please contact me if you have any specific queries or even if you just want to have a chat.

**Brett Tucker,**  
**NPIRD Coordinator**

### • *Basin Talk*

The Murray-Darling Basin Commission (MDBC) produces Basin Talk – a newsletter in the form of an audio tape which comments on work in progress.

The March issue of 'Basin Talk' features:

- A talk by Don Blackmore (MDBC) on his views of the future for Lake Victoria;
- David Dole of River Murray Water – 'If the drought continues, what then?'
- Dr Paul Humphries of the Murray-Darling Research Centre talking about improving environmental flows on the Campaspe.
- Bill Johnston of the Department of Land and Water Conservation discusses the use of native grasses for profit and recharge control.
- Dr Anna Ridley of AgVic examines the environmental impacts of high input pasture systems, and
- Phillip Beale and Alex Knight from Primary Industries and Resources, SA, discuss the notion that alley farming will give farmers an incentive to control recharge and reduce off-site impacts.

For further information, or to be placed on the mailing list, contact  
Daniel Connell  
MDBC  
GPO Box 409 Canberra Act 2601

• ***Keeping in touch – Management Committee Notes:  
Key issues from the minutes 33rd and 34th Meetings (May and July 1998)***

*NPIRD Management Committee*

		<b>Phone</b>	<b>Fax</b>
Ms Christine Forster (Chairperson, LWRRDC)	Vic	(03) 5352 1530	(03) 5352 3363
Dr Roger Shaw	Qld	(07) 3896 9472	(07) 3896 9623
Mr Ross Williams	NSW	(02) 9895 7992	(02) 9895 7798
Mr Steve Mills	Vic	(03) 5862 1777	(03) 5862 2732
Mr Richard Wells	Vic	(03) 5025 2288	(03) 5025 2275
Mr Warwick Watkins	NSW	(02) 9563 8601	(02) 9563 8437
Mr Geoff Wright	NSW	(03) 5882 6328	(03) 5882 6373
Dr Nick Schofield (Program Manager, LWRRDC)		(02) 6257 3379	(02) 6257 4320
Mr Brett Tucker (Coordinator)		Phone/Fax (02) 6964 1873	

• **Funds**

With the return of some funds to the program, the Committee considered means by which carry-over funds could be reduced. In addition to the commissioning of some new projects in priority areas, the Program Coordinator will develop an income/expenditure plan that aims to reduce carry-over funds in line with Management Committee targets.

• **Review of QNR 2**

It was decided that the Coordinator would confer with the Project Advisory Committee and prepare a discussion paper to clarify the status of the project, as it is running behind schedule, and convene a review panel to consider preferred options for the project. The review panel would consist of Brett Tucker, Roger Shaw, Richard Wells, Andrew Sinn and a nominee from MIA.

• **Coordinator's Project Schedule**

The following activities were noted as priorities:

- Review and report on specified projects
- Undertake actions to complete implementation of SAS 1 (Research and development of best practice for horticulture irrigation rehabilitation).
- Prepare documentation for a Risk Management Study
- Continue discussions with States re ongoing commitment to the NPIRD program.

• **Program Review**

Public consultation will be completed by November 1998, and LWRRDC decision on the continuation of the next round of funding would be expected in December 1998.

• **Applications approved for funding**

**1. Risk Management Consultancy**

The Committee approved the terms of reference and budget for a scoping study addressing risk management in water supply and pricing.

The outcomes of this consultancy will be a scoping report that assesses the need for risk management research and development within the context of current and projected water supply and pricing policies, and how these needs can be addressed. LWRRDC will use this report as the basis for determining future NPIRD investments in the area of irrigation risk management. Recommendations may be considered for funding in the next project call.

Expressions of interest are now being sought for this consultancy work, the total cost of which is budgeted at \$17,500.


**2. Contour Irrigation Efficiency**

The Committee approved the second round application from Associate Professor Hector Malano to investigate models to improve the efficiency and flexibility of contour irrigation design. Given the volume of irrigation water that is applied under contour irrigation systems, the committee felt that there was potential for significant water savings with improved system design and management.

This project will operate over a two year period. The results will be critical to the successful implementation of the Land and Water Management Plans in the Southern Murray-Darling Basin.

**3. National Water-Use Efficiency Working Group**

Approval was given for funding to establish a National Water Use Efficiency Working Group in order to improve coordination of the extensive range of work being undertaken on projects related to water-use efficiency.



Provisional funding of \$30,000 was provided to enable the formation of the working group and the development of a strategic plan. The group will take on a 'technical policy' role, providing guidance on a range of technical matters including definitions of water use efficiency. In addition, the operation of the working group will allow exchange between the various regions and project managers.

#### 4. The Future of Irrigation in a Global Context

Following the foresighting exercise conducted by NPIRD earlier this year, the Management Committee approved in principle a proposal to undertake a further study aimed at establishing longer term goals for the irrigation industry in light of global trends in food production and consumption.

#### 5. Information packaging

A recent survey conducted by NPIRD identified the need for new forms of information transfer. In particular, the need for greater use of electronic media was identified in the survey. To this end, the Management Committee approved expenditure of \$30,000 for the preparation of information packages on three key issues for the irrigation industry, the first of which will be a unit on water-use efficiency. This package will be made available on the NPIRD web site as well as fact sheets.

#### 6. Nutrient removal from irrigation drainage using wetlands

The Management Committee has asked Ross Plunkett from Goulburn-Murray Water to submit a second round application detailing his proposal to investigate the modification of drainage channel design to reduce the impacts of nutrient stripping from irrigation farms.

Whilst there has been a number of past projects addressing the use of wetlands in nutrient management, the committee felt that this project was taking a fresh approach to the problem.

- **SAS 1 project review**

Before public release, some amendments to the manual are necessary in order to minimise legal risk to LWRRDC. The amendments are relatively minor, including some re-wording and supporting documentation. Once the document is amended, implementation should proceed. Sunraysia Rural Water Authority, ANCID and IAA will be approached to see if they would take on the implementation phase. Funds were allocated for the amendments and the publication costs.

- **Resignation of Robert Hutchinson**

Mr Hutchinson tabled his resignation, citing a need to allow more time for personal pursuits. The Chairman formally thanked Robert on behalf of the Committee and expressed sincere appreciation for his efforts over the years. A new nomination for the Committee from Queensland is anticipated soon.

- ***Interested in the Internet?***

The Rural Industries Research and Development Corporation has recently published *'The Australian Farmer's Guide to the Internet'*.

This 345-page book includes a CD-ROM containing two starter kits – Ozemail and Telstra Big Pond; 10 shareware programs related to easy use of the Internet, and at least six Microsoft products.

The book itself is well-produced, and features an interesting version of Sydney Nolan's Ned Kelly on the cover.

Sections within the book describe the Internet, how to get started, general information on the World Wide Web, electronic mail (Email, a very useful addition to the way we can communicate), searching the Web, and newsgroups, mailing lists and chat groups.


It also describes how to design, build and maintain your own Web page.

The second part of the book goes through WWW sites for farmers and rates them on content and appeal. It also includes a list of Internet service providers in rural Australia and an index of Web sites.

*A useful and easy-to-follow book if you are deciding whether to connect in to the Internet.*

Available from  
RIRDC Level 1  
AMA House 42 Macquarie Street Barton  
ACT 2600.  
Phone: 61 2 6272 4539  
Fax: 61 2 6272 5877  
Email: rirdc@netinfo.com.au

Cost \$25.00



## • *WaterWheel Survey Results*

In May we surveyed a proportion of our readership to see whether stakeholders of the NPIRD program were content with WaterWheel in general, and whether we could improve the ways in which NPIRD information reaches our clients.

We also wanted to know whether people were interested in the various forms of electronic information now available.

*A big thankyou to the readers who took the time and trouble to fill in the form, and let us know their views.*

We found that WaterWheel and the research supplements are the most preferred form of information about the program, followed by field days, demonstration sites and fact sheets.

Water-use efficiency is the topic that interests most readers, and most respondents were more interested in technical rather than academic level of information.

Videos are less popular than booklets and fact sheets for particular irrigation topics.

Most respondents (96%) owned computers and could be interested in electronic information either through Email or a NPIRD/irrigation Web site attached to the LWRRDC Web site.

There was also considerable interest in an interactive CD-ROM on sustainable irrigation.

A full report on the survey results will be available as soon as the draft report is finalised.

*Sally Berridge*  
*Communications coordinator*

## • *Irrigation Training and Education*

The Irrigation Association of Australia (IAA) and LWRRDC have together been addressing the educational needs of irrigators.

Recently a booklet has been produced which lists rural and urban training courses for those wishing to improve their skills.

The 70-page booklet gives details of both irrigation specific and irrigation related courses at University and TAFE levels, as well as courses run by private institutions, industry and by agencies. The booklet includes details of irrigation and training providers and the courses, as well as a section on learning materials and competency standards.

*'Irrigation Education and Training Courses - 1998'* is available from  
The Irrigation Association of Australia Ltd.  
PO Box 301  
Homebush South NSW 2140  
**Phone:** (02) 9746 0531  
**Fax:** (02) 9764 2331  
**Email:** pgarrad@netspace.net.au  
IAA's web page is at: [www.iaa.org.au](http://www.iaa.org.au)

## • *For Your Diary*

### **1. NPIRD Prioritisation Workshop**

**Dates:** 21-22 September 1998

**Venue:** To be confirmed

**Contact:** Brett Tucker (details on back page)

*This workshop is to establish priorities for the next funding round.*

### **2. Are your channels leaking? The irrigation industry takes its measure**

**Dates:** 26-27 October 1998

**Venue:** Moama NSW

**Contact:** Merrill Boyd

PO Box 58 Berrigan NSW 2712

**Phone/Fax:** (03) 5885 2500

*A workshop to more accurately measure and assess the potential business risk that channel seepage may pose to an organisation.*

## • **Wetlands Management Issues**

Those of you concerned with the overlap of wetlands and irrigation may be interested in the scoping review of the National Wetlands R&D Program. A further series of wetlands papers is also in preparation, to address regional issues. Another paper will cover Queensland and Northern NSW.

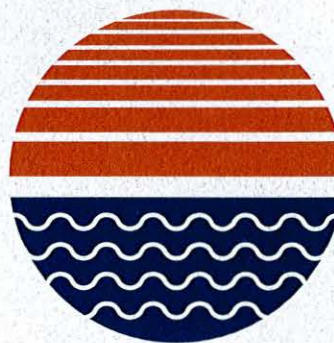
– **National Wetlands R&D Program:** Scoping Review. (01/97). Price \$8.00.

– **National Wetlands R&D Program:** Regional Reviews of Wetlands Management issues – Western Australia (except Kimberley) and Central Australia. (02/97). Price \$8.00.

– **National Wetlands R&D Program:** Regional Reviews of Wetlands Management issues – Wet-Dry Tropics of Northern Australia. (03/97). Price \$8.00.

All are available from the DPIE Shopfront on Freecall 1800 020 157.

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