

# WATER RESEARCH Cluster Newsletter

## What's happening in water research at the University of Adelaide

The Water Research Cluster continues to evolve as research projects are developed with diverse partners, with a particular emphasis emerging on sustainability. Along with an update of current activities, this Newsletter features articles on recent water policy announcements and funding calls.

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*Urrbrae wetland just constructed in 1997  
(photo supplied by Allin Hodson)*



*Urrbrae Wetland nine years old  
(2006) (photo: Allin Hodson)*

## ARC Linkage Seed Funding

The Water Research Cluster is again offering cash support of \$1,000 to University of Adelaide staff to assist in the preparation of applications to the next round of the ARC Linkage Program. The funding can be used to employ casual assistance to prepare budgets, write the grants, liaise with partners, etc.

The \$1,000 is contingent on the following criteria being met:

- the research project relates to water and is "multi-disciplinary" in nature
- the project is ineligible for the Science Faculty support of \$5,000 (which requires the CI to be based in the Science Faculty and the industry contribution to be 30% or greater).

If you would like to take advantage of this offer by the Cluster, please email the following information to Paul Dalby:

- project title
- a brief description of the project
- the Chief Investigators and other participating researchers
- a short justification on why the project is multi-disciplinary
- a list of the industry partners and their contribution
- a list of the other cash and in-kind resources sought for the project (including ARC and University in-kind).

The Cluster Leadership Panel will make the final decision on which projects will receive seed funding.

## New Communication Medium Launched

The Water Research Cluster has launched News Splash, a regular information email giving an update of activities, programs and news related to water related research. Each News Splash has a series of short articles of a few lines with links to further information. More details are given in [Water Information Links](#) later in this Newsletter.

## Invest Australia Seeks Innovation Projects

*Invest Australia* facilitates investment into Australia from businesses overseas. Paul Dalby met with a delegation from *Invest Australia* business advisors based in Europe who wish to identify technologies which require capital input or where there is IP available for sale. They have clients in Europe interested in water-related technologies, particularly (but not exclusively) in technologies relating to desalination. If you have some ideas of IP/technology that would be appropriate to present to *Invest Australia* or are interested in seeking more information, you may either contact Paul Dalby, (see below) or go to <http://www.investaustralia.gov.au/>

## Federation Fellows

Members and supporters of the Water Research Cluster are encouraged to consider appropriate applications for Federation Fellowships in the area of water research management for submission to the University of Adelaide's internal assessment process. Support from the Cluster can be sought for developing a full submission if the initial application is approved internally.

The Australian Research Council's Federation Fellowships are innovative and highly prestigious awards designed to develop and retain Australian skills. Open to applications from outstanding international researchers, Federation Fellowships particularly encourages applications from Australian and non-Australian researchers currently working overseas.

The University of Adelaide will implement a new internal process for vetting Federation Fellow applications for the next round. Initial applicants will need to submit their CV which will be assessed internally and the best candidates will be asked to develop a full application. Full submissions are due in October 2006.

## New Water Research Cluster Seminar Series

The Water Research Cluster has launched a new seminar series aimed at providing a forum for researchers in the Cluster to hear about research being undertaken across the University on water management and science. The first Water Research Cluster Seminar was held on 21 April.

The speakers were:

- Prof. Christopher Findlay, new Head of School of Economics, on water related research interests in the School of Economics
- Mr. Michael Leonard, Civil and Environmental Engineering, on Stochastic Rainfall Modelling in Space and Time
- Dr. Megan Lewis, Soil and Land Systems, on GIS and remote sensing for water management
- Dr. Justin Brookes, Environmental Biology, on water quality science and technology.

Each speaker provided a short overview of research in their respective areas, with examples of research projects to illustrate application of various technologies. It was notable that each presenter emphasized relationships with stakeholders which are expected to lead to application of their research into natural resource management. Several points of potential collaboration across the Cluster were highlighted during the seminar, and participants were encouraged to follow these up.

Further seminars are likely to follow a similar informal short format of 3-4 presenters over lunch or late afternoon drinks to encourage interaction between Cluster disciplines.

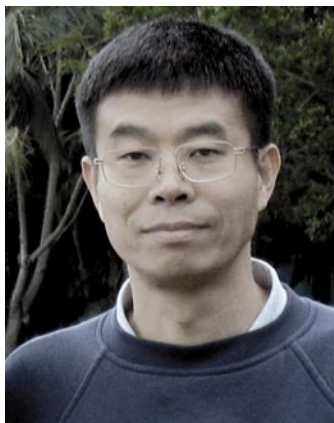
Other Seminars relevant to water science and management are listed on the Cluster website: <http://water.adelaide.edu.au>



Water ribbon flowering at Wellington Developments proposed wetland (photo: Anne Jensen)

# Research Cluster Profile: Introducing new lecturer Dr Jungho Suh

PhD (Economics), MA (Political Sciences and Economics), BA (Economics)



**Position:** Lecturer, Discipline of Geographical and Environmental Studies, School of Social Sciences

**Teaching:** *Sustaining a Fragile Planet; Resource Scarcity and Allocation*

**Research field:** non-market valuation of forests, employing the travel cost method, the contingent valuation method or choice modelling.

Ho has a doctoral degree in the field of economics in January 2002 from the University of Queensland, and he joined the Discipline of Geographical and Environmental Studies at the University of Adelaide in February 2006. Since his arrival, he has spent most of his time in teaching and coordinating a first-year subject, *Sustaining a Fragile Planet*, which covers a wide range of contemporary global and local

environmental issues involving physical and human geography, economics, philosophy and governance. Next semester, he will teach (Natural) *Resource Scarcity and Allocation*, which he interprets as a natural resource economics subject designed for non-economists.

Apart from his key research interest of non-market valuation of forests, his other research interests include:

- financial aspects of the management of natural resources
- the social and environmental impact of forest industry development options on regional communities
- the assessment of recreation and other opportunities in natural areas using multi-objective decision-support techniques.

Ho hopes to be an active and constructive researcher in collaboration with the other cluster members. He is excited to join the cluster and keen to contribute to the efforts of the water cluster by producing sound and useful research outputs in the near future.

Contact: Rm 811, Napier Building.

Phone No. 8303 3014

Email: [jungho.suh@adelaide.edu.au](mailto:jungho.suh@adelaide.edu.au)

## Water News Updates

### Australian Government to prepare water resources issues paper

The Australian Government is to prepare an issues paper on water resources which will be formulated from reports the Government is seeking from all states and territories about how they intend to cope with predicted water deficits.

Announcing the issues paper, Parliamentary secretary to the Prime Minister, Malcolm Turnbull, accused the states and territories of poor water management, especially in major cities and said the states need to be more accountable for urban water supplies. "We'll be seeking information on the sustainable yield for each city and the likely changes to that forecast yield," he said.

(source *EnvirolInfo Newsletter*)

### WA signs National Water Initiative

The Western Australian Government has relented and has signed the National Water Initiative under new Premier, Alan Carpenter. The signing means that all states have now signed the NWI. The WA Government had previously held out on signing, believing the NWI to have a predominant focus on the eastern states, particularly the Murray Darling Basin.

(source *EnvirolInfo Newsletter*)

### Private sector urged to help develop water strategies

The head of the National Water Commission says the private sector should be involved in developing water strategies and infrastructure. Ken Matthews made the comments in an address to the **Australian Water Summit** last month. The summit focused on the theme: 'Collaborating on our Water Future'.

Mr Matthews challenged the widely held view that water, like sewage, is a government-only domain. "We should be trying to build the private sector into the water sector," he said. Mr Matthews also says Australia has the potential to be a world leader in technology that enables sewage to be turned into drinking water. "Australia, more than any country, must surely be interest in providing science accepting of that process," Mr Matthews said.

(Source: *ABC online*)

### Public Awareness of Water Issues Rising

The Water 06 conference in Brisbane heard that water is now being discussed in a way that it never has before. Delegates from around the country gathered to discuss issues ranging from water reform to securing future supplies. Brisbane Water chief executive Jim Reeves said water is today's hot topic. "Paul Keating said in the early 1990s that every pet shop parrot was talking about micro economic reform," he said. Today those parrots would be talking in husky and hushed tones about water shortages ... pinning for the days when water supply was predictable in both quality

and quantity." Futurist Dr Keith Suter says there is now much greater public awareness about the situation. "It is very significant the way in which water has become such a hot issue," he said.

(Source: *ABC online*)

### New UNESCO European Regional Centre for Ecohydrology

For those interested in the international debate over the merits of Ecohydrology or Hydrobiology as the overall paradigm for the framework for understanding ecology of rivers and catchments, a new **European Centre for Ecohydrology** has been announced. The former International Centre for Ecology of the Polish Academy of Sciences will become the new focus for ecohydrological research under the auspices of UNESCO, with the formal opening ceremony on 31 May in Lodz, Poland. This development has been coordinated by Prof Maciej Zalewski, who has been dominant in the development of the ecohydrological paradigm (<http://www.mcepan.lodz.pl>).

Ecohydrology is defined as a new approach in environmental sciences that promotes the integration of hydrology and ecology for the sustainable management of water resources. The development of this field of research has been supported in a series of UNESCO programs since 1988, starting with the Ecotones Project, then the Ecohydrology Program under the International Hydrology Program.

## Prizes and Awards

### Prime Minister's Environmentalist of the Year

This year the Prime Minister's Award for Environmentalist of the Year is being expanded to recognise outstanding contributions to protect Australia's important heritage places. Nominations are now eligible from projects that are involved in protecting Australia's significant natural, historic or Indigenous places or environments. You can now nominate for the Award if you have been involved in a project that has helped:

- conserve and protect a significant place
- provide education or raised awareness of a special place, and
- raised awareness of the issues of protection and conservation of Australia's significant heritage and environmental places.

Nominations are open to **10 May 2006**.

For information on how to enter go to [www.banksiafdn.com](http://www.banksiafdn.com)

### Prime Minister's Prize for Science

### Science Minister's Prize for Life Scientist of the Year

### Malcolm McIntosh Prize for Physical Scientist of the Year

The Prime Minister's Prize for Science is awarded for an outstanding specific achievement in any area of science advancing human welfare or benefiting society, and has been awarded previously to such luminaries of Australian science as Frank Fenner, Donald Metcalf and Jacques Miller.

The Malcolm McIntosh Prize for Physical Scientist of the Year and the Science Minister's Prize for Life Scientist of the Year are awarded to scientists who are thirty-five years of age or younger, and are designed to honour excellent research and to highlight that our early-stage career scientists are producing world-class research.

Application details are available from:

<https://sciencegrants.dest.gov.au/SciencePrize/Pages/Home.aspx>

Nominations for these prizes should be sent to [Lynette Kelly](#) in ARI-Research Branch by no later than c.o.b. **Monday 15 May**.

### 2006 Australian Museum Eureka Prizes

Entries are now open in the 2006 Australian Museum Eureka Prizes, which consist of 20 awards worth over \$200,000 and include the largest line-up of prizes for research into environmental and sustainability issues facing Australia.

The 2006 Australian Museum Eureka Prizes offers awards in 4 categories:

- Research
- Leadership and Innovation
- Education
- Science Communication.

The prizes include:

- \$10,000 Botanic Gardens Trust Eureka Prize for Biodiversity Research
- \$10,000 British Council Eureka Prize for Innovation and Leadership in Environmental Science
- \$10,000 CSIRO Eureka Prize for Leadership in Science
- \$10,000 Land & Water Australia Eureka Prize for Water Research
- \$10,000 Sherman Eureka Prize for Environmental Research
- \$10,000 University of New South Wales Eureka Prize for Scientific Research.

Be part of the Australian Museum Eureka Prizes by entering yourself or nominating someone for one of these prestigious prizes. Entries in all prizes close on **5 May 2006**.

Online - <http://www.amonline.net.au/eureka/>

### Banksia Environmental Foundation - DaimlerChrysler Australian Environmental Research Award

This award has been established to recognise and promote Australian researchers or research programs that have made a significant contribution to understanding, or resolving, local or global environmental problems. The research being nominated should be:

1. Fundamental research related to understanding of any process, systems or mechanisms of significant anthropogenic damage to the environment (Physics, Chemistry, Ecology)
2. Applied research related to production processes, infrastructure, products, or information systems.

The closing date for entries is **10 May 2006**. Information is available at <http://www.banksiafdn.com/>

## Who is the Water Cluster?

The Water Research Cluster coordinates water research across the University of Adelaide. The Water Research Cluster has a strong culture of collaboration and support of teams, and has a particular focus on supporting early career researchers.

### Leadership Panel

A Panel of academics from across the disciplines and schools of the University provide strategic direction and management of the Cluster.

The current members of the Leadership Panel are:

- Graeme Dandy (Civil and Environmental Engineering) - Champion
- David Chittleborough (Geology and Geophysics) - Champion
- Angus Simpson (Civil and Environmental Engineering)
- Marcus Lane (Geography)
- David Jones (Architecture)
- Peng Bi (Health)
- David Lewis (Chemical Engineering)
- Mike Geddes (Environmental Biology).

The Water Research Cluster has specific strengths in the following fields of research:

- Integrated Catchment Management
- Managing Water in Arid Areas
- Managing Wetlands and Rivers
- Sustainable Irrigation
- Wastewater Treatment and Management
- Water Management in Urban Areas

### Cluster Coordinator

Dr Paul Dalby

If you would like to advertise or send material for the Newsletter of the University of Adelaide Water Research Cluster, please contact Paul Dalby on 0401 122 204 or [pdalby@internode.on.net](mailto:pdalby@internode.on.net)

# Water Research Cluster Postgraduate Corner

The Water Research Cluster Postgraduate Forum on 22 March was based on the theme of **'the evolving science of constructed wetlands'**. The guest speakers were Dr Allin Hodson, Coordinator of the Urrbrae Wetlands Complex, and Dr Paul Dalby, a Director of Wellington Wetlands Developments.

In a lively session, **Allin Hodson** described the teething problems of a constructed wetland and the difficulties of matching the varying objectives of stakeholders with the evolving dynamics of a working wetland. Key issues revolve around the major impacts of first flushes each winter season, with the accumulated debris from the catchment hitting the wetland in the first pulse of inflowing water. Allin gave a thought-provoking presentation inter-weaving the science, practical management and education potential of the Urrbrae Wetland. Some examples included the research to isolate the source of detergent-like foams during first flushes (saponins generated by native eucalypts to repel insect attack, not human over-applications of pesticides as originally thought), the ineffectiveness of trash racks to capture pulverized eucalypt leaves and fine organic sediments from road surfaces, and the difficulty of isolating the source of oil pollutants reaching the wetland.

This working example of a constructed wetland clearly demonstrates the need for ecological input as well as engineering know-how into the design of constructed wetlands. The objectives for ongoing management of the wetland also need to be very clear, to ensure that these objectives can be met over time, and that changing perceptions and objectives are transparent if management objectives need to be changed.



*Sediment and vegetation debris collected in trash rack after flow (photo: Allin Hodson)*

**Paul Dalby** presented an innovative new development proposal near Wellington on the Lower Murray which aims to incorporate wetland repair into a housing development. The housing development would fund rehabilitation of a former dairy swamp to provide a significant area of wetland habitat in a region with less than 6% of natural wetlands remaining.

The current design includes proposals for temporary and permanent wetlands, islands, protected areas to encourage turtle breeding, management of water regimes to reduce the impact of carp, gradual replacement of European willows with river red gums and other native plants, and protection of aquatic plants. Incoming residents would be encouraged to become involved in monitoring and management of the wetland, with extensive walking trails through the area, a conservation zone and bird hides.

This is an example of a new development approach which seeks to combine economic and environmental benefits in one project.

The next postgraduates forum is scheduled for 7 June at the Urrbrae Wetlands Education Centre.

## Water Fact File

Some quick water facts are again provided for the use of water researchers for inclusion in presentations, talks and papers.

### What Price Bottled Water

Consumption of bottled water is increasing by 12% per year, in spite of its excessively high price compared to tap water. Even in countries where public drinking water meets safe standards, bottled water sells for up to 1,000 times the cost of tap water. The high price paid for bottled water means that 90% of the cost is the bottle, lid and label.

Annual consumption is 89 billion litres, worth \$US22 billion, with Western Europe consuming 46% and North America 20% and use in the Pacific region is rising by 15% annually (UNESCO 2003, 2001 figures). The 'Hartford Advocate' newspaper quotes a worldwide value of \$US35 billion in 2002.

The environmental impacts include the use of PET plastic bottles made from oil and natural gas, using 1.5 million tons of non-renewable resources annually (<http://www.emagazine.com/>). Manufacturing this quantity of PET generates 100 times more toxic emissions compared with the manufacture of the same quantity of glass. Transportation of bottled water adds to contributions to greenhouse gas emissions. Ironically, the process of disposing of empty plastic water bottles

can lead to toxic gas discharge if they are incinerated, or toxic leaching from landfill which can contaminate water sources.

A UNESCO fact sheet compiled for the 2003 International Year of FreshWater states that bottled water as not a sustainable alternative to tap water and encourages consumers to make responsible choices, such as installing filters on their taps, re-using bottles and recycling bottles.

The 'Bottled Water Blues' fact sheet warns about concerns over the quality of bottled water, with 60-70% of bottled water sold in the US being exempt from the FDA bottled water standards. City tap water is subject to much more rigorous water quality standards. They also recommend home filtration and self-bottling as the most environmentally friendly alternative.

- [Facts and Figures Bottled Water International Year of Freshwater 2003. htm](#)
- [BottledWaterBlues.com](#)
- [http://assets.panda.org/downloads/bottled\\_water.pdf](http://assets.panda.org/downloads/bottled_water.pdf)
- <http://www.emagazine.com/>
- [www.hartfordadvocate.com](http://www.hartfordadvocate.com)

### Cyclone Larry cools Reef water temperatures

Cyclone Larry has had a positive impact on the Great Barrier Reef, and may possibly prevent further bleaching of the coral over the next 12 months, according to scientists from the University of Queensland.

Despite speculation in the media that the cyclone had caused wide-spread damage of the Reef, it appears to have been spared much damage due to the speed of Larry, and Dr Ove Hoegh-Guldberg says that the weather event has in fact cooled ocean temperatures which had soared over the summer.

"Cyclones, as far as a reef is concerned, are quite fortunate events because they turn the water column over and they remove the warmer surface layers," he said. "It was so intense and moved so quickly that it crossed the Great Barrier Reef in a matter of hours, and for that reason it's unlikely that it had major impacts on reef structure but we still need to do underwater surveys."

(Source *EnviroInfo Newsletter*)

# Water Jobs & Scholarships

## Experience In Indonesia Sought

The International Centre of Excellence in Water Resource Management (ICE WaRM) is seeking an academic with experience in cooperation with Indonesia to participate in a delegation to Indonesia in mid May to discuss potential research and education cooperation in water management. If you meet this criteria and would be interested in participating in the delegation, please contact Paul Dalby (see below).

## International Study Opportunities

### Indian Research and Student Links

During his recent visit to India, the Prime Minister announced \$20m in new funding to support a bilateral research program with India (the Australia-India Strategic Research Fund), \$3.5m for Endeavour India Research Fellowships (providing top researchers from India an opportunity to undertake short-term postgraduate and postdoctoral research in any field of study in Australia, and Australians to do the same in India), and \$1.5m for Endeavour Executive Awards (providing professional development opportunities for high achievers in business, industry, education and government from Australia and India at their counterpart organisations).

Details are at [http://www.dest.gov.au/sectors/international\\_education/p](http://www.dest.gov.au/sectors/international_education/p)

## New scholarship scheme for undergraduates to the Netherlands

DEST has introduced new scholarships of \$5,000 per student for 20 Australian undergraduates to undertake part of their studies in the Netherlands under institution-to-institution student exchange arrangements. These Endeavour Duyfken Student Exchange Awards commemorate the 400th anniversary of the first Dutch contact with the Australian continent. For further information, see the Endeavour Awards website (below).

### AusAID eligibility

Adelaide University is now eligible to participate in the Australian Development Scholarships (ADS) program, commencing in first semester 2007. The University is permitted to market for prospective students for the January 2007 intake as soon as we have advised AusAID of our intention to participate in the new ADS program, but we cannot accept these students until after the services agreement has been signed.

### Endeavour Awards Program of international scholarships

Information on these awards is available on DEST's new web site:

<http://endeavour.dest.gov.au/>

Applications close on **30 June** for all the Endeavour student exchange awards.

There are also Endeavour research fellowships for India, Pakistan, Malaysia, Turkey, Europe, Iraq, Canada and Latin America: closing dates for applications for these are at different times in July/August.

Information on international opportunities supplied by Dr Alan Collins of Geology & Geophysics, School of Earth and Environmental Sciences.

## Baudinette Travel Scholarship

In commemoration of the contributions made by Professor Russell Baudinette, Foundation Head of the Department of Environmental Biology, one travel scholarship will be awarded annually to a talented, full-time PhD student currently enrolled in the School of Earth and Environmental Sciences, University of Adelaide. Preference will be given to students undertaking research in whole animal physiology or ecology. The minimum value of the scholarship in any year will be \$1,000.

The purpose of the scholarship is to provide financial support to attend an international conference to present a paper or poster, with the aim of providing the recipient with the opportunity for promotion and exposure to international researchers.

The closing date for applications is **31 May 2006**.

Please email Tim Scroop on [tim.scroop@adelaide.edu.au](mailto:tim.scroop@adelaide.edu.au) for an application form.

# Water Research Cluster Activities Global Lake Ecological Observatory Network (GLEON)

Dr. Justin Brookes, a newly appointed lecturer in the University of Adelaide, was recently invited to attend the joint workshop of the Global Lake Ecological Observatory Network (GLEON) and the Coral Reef Ecological Observation Network (CREON) along with approximately 50 participants from around the world. His visit to the workshop was kindly supported by the CRC for Water Quality and Treatment. The sponsors for GLEON include the Moore Foundation (Gordon and Betty Moore were the founders of INTEL), the Australian Research Council, the Queensland Parallel Supercomputing Foundation, Silicon Graphics Inc and Sun Microsystems.

The Global Lake Ecological Observatory Network (GLEON, [www.gleon.org](http://www.gleon.org)) is a grassroots network of limnologists, information technology experts, and engineers who have a common goal of building a scalable, persistent, international network of lake ecology observatories. Data

from these observatories will help us to better understand key issues such as the effects of climate and land-use change on lake function, the role of episodic events such as typhoons, cyclones or mixing events in resetting lake dynamics, carbon cycling, cyanobacterial growth and pathogen transport within lakes. The observatories consist of instrumented platforms capable of sensing key limnological variables and moving the data in near real-time, often through wireless networks, to web-accessible databases. A common web portal is being developed to allow web access of data and information by researchers and the public.

With cyber-infrastructure provided by members of the Pacific Rim Applications and Middleware Assembly ([www.pragma-grid.net](http://www.pragma-grid.net)), near real-time data is currently available for lakes in Wisconsin and Taiwan. A global network of dozens or even hundreds of automated lake observatories, each collecting

and transferring data in near real-time, will occur within the next decade and will offer new opportunities in scientific collaboration and understanding of lake processes to improve management.

GLEON network is planning to expand its capacity from just observation to modelling and this will yield considerable benefits for the GLEON partners. At present it is possible to capture data from a GLEON database, arrange the data into the appropriate model input format, run the lake metabolism model and output the results all from a web-based platform. The development and inclusion of models within GLEON will enable a better prediction of water quality and facilitate reservoir management.

If you are interested in finding out more about GLEON and its potential application in Australia, please contact Justin Brookes on [justin.brookes@adelaide.edu.au](mailto:justin.brookes@adelaide.edu.au)

## Water Info Links

Useful information on water-related topics can be found in the electronic sources listed below.

### EnviroInfo Newsletter

EnviroInfo is a fortnightly eNewsletter for professionals in the natural resources and environment management fields. You can obtain a subscription by sending an email to [info@envirocentre.com.au](mailto:info@envirocentre.com.au) with the words 'Subscribe EnviroInfo' in the subject line.

Other publications from the same group include:

- **Enviro Jobs**  
<http://www.envirojobs.com.au>
- **Environment Business**  
<http://www.halledit.com.au/publications/envbiz.htm>
- **Land and Water News**  
<http://www.halledit.com.au/publications/lawn.htm>
- **EcoVoice** environmental newspaper is available online at [www.ecovoice.com.au](http://www.ecovoice.com.au)

### CSIRO Australian Research Centre for Water in Society (ARCWIS)

Interesting research results are published in the regular newsletter or through the website [www.clw.csiro.au/research/arcwis/](http://www.clw.csiro.au/research/arcwis/)

The newsletter can be ordered by email at [arcwis-enquiries@csiro.au](mailto:arcwis-enquiries@csiro.au)

### Greening Australia

A very useful publication from Greening Australia is *Riverways: shortcuts to river management information in Australia*. This compilation is based on a survey of river managers about the most useful sources of information, and presents neat single-page summaries for departments, catchment management authorities, non-government organizations, publications and other resources. (*Anne Jensen has two spare copies available, otherwise contact Greening Australia*).

### News Splash

News Splash is a regular information email from the Water Research Cluster with a series of short articles of a few lines with links to further information. To register, send an email to [paul.dalby@adelaide.edu.au](mailto:paul.dalby@adelaide.edu.au) with the words Register News Splash in the subject heading. To Unsubscribe, enter the words Unsubscribe News Splash in the subject heading. Send any submissions for News Splash to Paul Dalby.

## Water Organisation Links

The International Centre of Excellence in Water Resources Management produces the ICE WaRM eNewsletter. You can subscribe at <http://www.icewarm.com.au/mailman/listinfo/enews>

### Australian Water Association

Many items of interest can be found on the website of the Australian Water Association -- visit <http://www.awa.asn.au> and view the calendar and weekly newsletter there.

AWA has a national coordinating committee under way now, to help in the areas of professional development, training and tertiary education for water. It's called WICD (Water Industry Capacity Development - wicked) -- watch the website for developments.

### Land & Water Australia

Land & Water Australia provide significant sources of water-related research information and funding for projects. Their website is [www.rivers.gov.au](http://www.rivers.gov.au) and access to their many publications can be gained from there. Their regular publication RipRap presents very useful overviews of current projects and research findings.

A recent seminar in Adelaide presented the outcomes of the research program 'Quantifying the Health of Ephemeral Rivers', which focused on the Cooper Creek catchment. The research principals were Dr Fran Sheldon of Griffith University and Dr Justin Costelloe of the University of Melbourne. Druing the planning stages, University of Adelaide inputs came from Assoc Prof Keith Walker and Assoc

## Water Funding Calls

### \$1.6 billion Water Smart Australia Program

The National Water Commission is now calling for proposals from eligible organizations for funding under the Australian Government's \$1.6 billion Water Smart Australia Program. Water Smart Australia is a major component of the \$2 billion Australian Government Water Fund. It aims to accelerate the uptake of smart technologies and practices in water use across the country.

The program will consider projects that are consistent with and which progress the National Water Initiative. These projects would normally be large scale, resulting in on-ground water management improvements producing significant public benefits. Contributions from parties who gain significant benefits from a project are expected.

Guidelines for the general program are available from the Commission's website and applications close on **16 June 2006**.

National Water Commission: Email: [enquiries@nwc.gov.au](mailto:enquiries@nwc.gov.au) website: <http://www.nwc.gov.au>  
(source *EnviroInfo Newsletter*)

### NSW Water Savings Fund - Round 2 Open

The second round of the NSW Water Savings Fund aims to stimulate investment in water savings in the commercial, industrial, government and residential sectors and provides \$30 million a year over the next four years. The key criteria in the second round is for cost-effective projects which save water within Sydney Water's area of operations (Sydney, Blue Mountains, Illawarra). The priorities in Round 2 are projects which recycle water or implement water savings actions identified by high water users. An extra \$10 million has been allocated to the Fund in 2006 for high water users to implement identified water savings measures.

Applications close on **10 May 2006**.

The Guide for Applicants and application form are available on the Department of Energy, Utilities and Sustainability website <http://www.deus.nsw.gov.au/waterandenergysavings>

### AusIndustry Cooperative Innovation Program

Applications are being sought for round 2 of the Industry Cooperative Innovation Program, a \$25M program offering grants ranging from \$50,000 to \$3M. The program supports business-to-business cooperation on innovation projects that enhance the productivity, growth and international competitiveness of Australian industries. The program will support projects focused on meeting strategic industry needs, with particular focus on those identified through an Action Agenda. The Industry Cooperative Innovation Program requires a consortium to be formed from a minimum of three entities to cooperatively conduct a project on behalf of an industry.

Closing date: **15 June 2006 - 5pm** <http://www.ausindustry.gov.au>

## Water Research Links – Funding Opportunities

Watch for new funding opportunities on the ARI website  
<http://www.adelaide.edu.au/ari/researchers/grants/fundingopps.html>

The Grant Opportunities page on the ARI website provides access to all ARC and NHMRC opportunities as well as the rural and natural resources R&D corporations. In addition, you can also access the myriad of other funding opportunities.

### Australian Research Council (ARC) Linkage – International Awards

Internal Closing Date: Continuous

[http://www.adelaide.edu.au/ari/researchers/grants/ARC\\_LinkIntern.html](http://www.adelaide.edu.au/ari/researchers/grants/ARC_LinkIntern.html)

Purpose: Build links between research centres of excellence in Australia and overseas by funding extended collaborations

### Macquarie Bank Foundation

Internal Closing Date: Apply any time

[http://www.macquarie.com.au/au/about/macquarie/macquarie\\_in\\_the\\_community.htm](http://www.macquarie.com.au/au/about/macquarie/macquarie_in_the_community.htm)

Areas of interest: education, the arts, health research and health care, welfare and the environment.

### Middle East Desalination Research Center (Oman)

Internal Closing Date: Apply any time

<http://www.medrc.org>

Purpose: conduct, support and coordinate basic and applied R&D in water desalination and supporting fields, with the overall objective to reduce the cost of desalination.

### Myer Foundation

Internal Closing Date: Apply any time

<http://www.myerfoundation.org.au>

Areas of Focus: Arts and Humanities, "Beyond Australia", Water and Environment, Philanthropy, Social Justice

### Sarah Scaife Foundation (USA)

Internal Closing Date: Apply any time

<http://www.scaife.com/sarah.html>

Interest: public policy programs that address major domestic and international issues

### Grants for Field Research - Earthwatch

Closing Date: Ongoing

Purpose: To create an opportunity for public involvement in significant research that addresses scientific, environmental and policy problems and issues.

Website: <http://www.earthwatch.org/research/index.html>

Contact Details: Ms Jane Gilmour, Director Earthwatch Australia

Email: [jgilmour@creativeaccess.com.au](mailto:jgilmour@creativeaccess.com.au)

Telephone: (03) 9682 6828

### Tenders and Jobs

Tenders are posted on the NRMjobs website, which can be found at:

<http://www.nrmjobs.com.au>

NRMjobs advertises jobs and other opportunities in the environment, water and natural resource management field in Australia and New Zealand. A separate service WaterJobs is also now available at the same website.



*Murray lilies are currently flowering on the sandy rises of the Murray floodplain (photo: Anne Jensen)*

## Conference Diary

(primary source *EnviroInfo Newsletter*)

### Engineering Education Australia (EEA) Short Courses on Stormwater Management (Source Control)

1-2 June 2006, Adelaide

Details on this course are available from EEA - visit <http://www.eeaust.com.au> or email [gavin@eeaust.com.au](mailto:gavin@eeaust.com.au) or telephone (03) 9329 7201

### Coast to Coast 2006

22-25 May 2006,

Melbourne Exhibition Centre, Australia

Australia's biennial national coastal conference will focus debate across the full range of coastal and marine issues being considered at national, state, regional and local levels. A special Seachange Panel has just been announced as part of the program, featuring Professor Ian Lowe of ACF.

Conference website: [www.iceaustralia.com/coastcoast2006](http://www.iceaustralia.com/coastcoast2006)

For more information phone: +61 (3) 9681 6288 or email: [coastcoast@iceaustralia.com](mailto:coastcoast@iceaustralia.com)

### Catchments to Coast conference

9-14 July, 2006,

Cairns Convention Centre, Cairns, Queensland

Hosted by the Society of Wetland Scientists 27th International Conference and the Australian Marine Sciences Association

Catchments to Coast is an international conference, the major focus of which will be the vital role and value of wetlands within the terrestrial and marine environments. Importantly, the joint conference provides an international platform for showcasing the need for, and benefits of, a multidisciplinary approach to the complex issues associated with the land-sea interface.

For more information, go to [www.catchments.org.au](http://www.catchments.org.au)

The Water Research Cluster newsletter is published once every two months. The latest version is uploaded to the Water Research Cluster website (<http://water.adelaide.edu.au>).

To receive a copy of the newsletter in printed form, send an email to [paul.dalby@adelaide.edu.au](mailto:paul.dalby@adelaide.edu.au) with the words **Subscribe Newsletter** in the Subject heading.

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