

Chapter 7

Sharing Our Knowledge



In recognising the importance of community understanding and knowledge in achieving its objectives, the CRC for Freshwater Ecology places a strong emphasis on communicating its research activities and findings to a broad audience. The CRCFE has been very successful in achieving a high profile within the Australian water industry. It is recognised by government agencies and politicians as a reputable source of information and makes a significant contribution community understanding through training presentations and discussions with community groups such as Landcare and Streamwatch.

7.1 Public awareness

Public Displays

The Lower Basin Laboratory (LBL) staff attended the Wentworth Show with a display on bug identification, carp tasting and general information, August 23–24.

- The LBL held a display of native fish at the Mildura Plaza, October 11.
- Ben Gawne participated in the launch of a carp cook book by the Department of Land and Water Conservation. The launch was held at the Sydney Fish Markets during August.

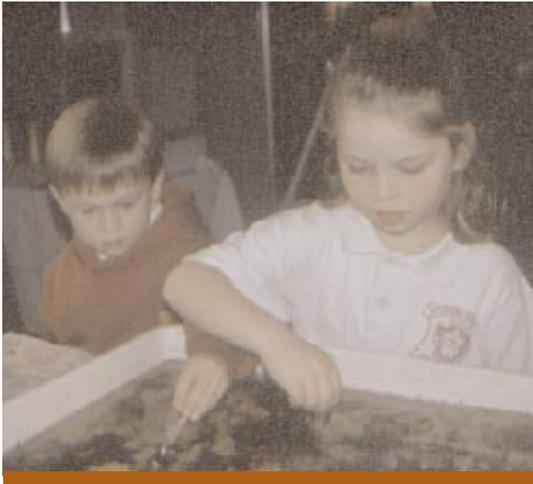


Sue Cunningham (right) explains how 'bugs' are being used to assess the health of rivers throughout Australia to community representatives who attended the launch of the ACT Government's Stormwater kit, held at the CRC for Freshwater Ecology.

Photo: Karen Markwort

The Murray-Darling Freshwater Research Centre opened its doors to the public and secondary schools on November 28–29. A reception was held for local dignitaries on the 28th.

- MDFRC staff attended the Hume Weir Open Day with a display profiling the CRCFE's activities and products.
- MDFRC staff also took part in the *Catch-A-Carp* activities held in Albury as part of National Water Week (October 25–26).



School students at the 1998 Science Festival hunting for bugs. *Photo: Karen Markwort*



Richard Norris (back) and Sue Nichols on the AusRivAS set with comic Vince Sorrenti (seated) and director, Steve Christiansen. *Photo: Karen Markwort*

- The CRC for Freshwater Ecology hosted the launch of an education kit, *Stormwater-Catchment management and Landcare*, by ACT Minister for the Environment Land and Planning, Gary Humphries. The kit, produced by Environment ACT and the Natural Heritage Trust, was distributed free to regional schools, CIT and key agency staff who work with community groups. About 40 representatives from ACT Government, natural resource agencies and community groups attended the launch, as well as the media.
- The CRCFE also presented a display in the refectory during the University of Canberra's Environment Awareness Week.
- University of Canberra's Open Day, September 13.
- National Science Week Amazing World of Science Exhibition, May 2–6.
- ScienceNOW-held at the Melbourne Exhibition Centre with the Great Australian Science Show (GASS), May 7–10. The CRCFE took part in a joint display that was hosted by Melbourne Water.

7.2 Communicating through the media

The media continues to be a powerful tool that the CRCFE uses in order to get its messages to a wide audience.

Six staff have undertaken media skills training during the year so that through an understanding of how the media operates they may use this medium more effectively to inform target stakeholders of their research activities and successes.

About 180 media hits were recorded during the year.

Radio	63
Television	16
Newspaper	68
Newsletters/magazine	53

Media releases issued

- July 2 Rural sustainability - can it exist? (Peter Cullen)
- July 29 Ridding rivers of the roach-study looks at water levels and carp breeding (Gawne)
- July 29 Burrinjuck study to focus on algal triggers (Lawrence)
- August 7 Study looks at algal blooms triggers (Oliver)



Learning the art of the 15-second 'grab'. Richard Norris (right) being interviewed by WIN TV reporter, Jeremy Lasek during a media training course. Toss Gascoigne on camera. *Photo: Karen Markwort*

- August 13 Humphries launches stormwater kit (Cullen)
- August 18 'Seize the day', river health expert urges NSW Government (Cullen)
- August 19 Water Reforms welcomed (Cullen)
- September 24 Fischer to open inland waters congress in Albury
- September 29 Murray cod science misrepresented (Harris)
- October 30 River health-what does it mean? (Norris)
- December 10 Forum to examine science used to NSW water reforms (Cullen)
- December 15 Scientists give water reform process the thumbs up (Cullen)
- December Scientists to survey 90 new sites in NSW rivers (Harris)
- February A decade of bug discovery (Hawking)
- March 19 Improving river health through scientific management (Norris)
- April 6 Floods lift researcher to national awards (Nielsen)



Belconnen Landcare coordinator Mary Ormay with ACT Minister for Environment, Land and Planning Gary Humphries at the launch of the stormwater kit, *Stormwater-Catchment management and landcare* conducted at the CRC for Freshwater Ecology, University of Canberra. About 60 government and community representatives as well as the Canberra media attended the launch. *Photo: Karen Markwort*

- April 29 River health expert says NSW water reforms a 'first step' (Cullen)
- April Australian river monitoring program goes international (Norris)
- April 'Dam' let me through: a migratory fish's lament (Harris)
- April River survey continues (Harris)
- June 24 Research centre puts up its hand for another \$100 million (Cullen)

In addition to these media releases, the journalists in both metropolitan and regional areas are kept informed of CRCFE activities and research findings through the distribution of *Watershed*.

Watershed articles have subsequently been featured in the regional and national newspapers and magazines, including the *Bulletin*.

7.3 CRCFE extension publications

Living on Floodplains - produced in cooperation with the Murray-Darling Basin Commission, this book was written by freelance science journalist, David Mussared, for a non-technical audience. This full-colour publication has been distributed to more than 1500 stakeholders and has received favourable feedback from both the recipients and media reviewers.

Watershed - industry newsletter distribution has increased to almost 3,000, five editions produced.

Fish and Rivers in Stress brochure

Campaspe Flows brochure

Chaffey Dam brochure-*Improving water quality in reservoirs*

AusRivAS training video

CRCFE wall posters

CRCFE 'Don't mess with my river' stickers

Exploring CRC Research - a cooperative production between environmental CRCs

Other extension publications

Freshwater algae in Australia-funded by the RE Ross Trust, this publication was supported by the Australian Society for Limnology, the Royal Botanic Gardens, Melbourne and the CRC for Freshwater Ecology. CRCFE staff member Jason Sonneman co-authored the book, along with Tim Entwisle and Simon Lewis.

John Hawking, MDFRC, contributed to the Gould League publication, *Australian guide to pondlife*, edited by B. Withers. In addition to assisting with the editing, John provided numerous photographs for the colour publication.

Also contributed to *Along Bush Tracks* produced by the Monument Hill Parklands Association and Albury-Wodonga Field Naturalists.

Ecology flows handbook

The CRCFE is also working on a joint publication with CSIRO Land and Water. The publication, *Ecology flows handbook*, is being

produced for the Murray-Darling Basin Commission under its Natural Resource Management Strategy (NRMS) Ecology Flows Program.

The book will contain up-to-date knowledge written by ecologists for the general community - in particular, managers. The handbook, which will aid government decision making, has involved close consultation with end users of the book-regional agency/departmental managers, TCM groups, policy makers, scientists, broader community interest groups. The book will also identify knowledge gaps for future research. CRCFE representatives on the editorial committee include Craig Schiller, John Harris, Terry Hillman, Peter Cullen and Dianne Flett.

7.4 Web world

The CRCFE is continuing to upgrade its Home Page on the World Wide Web. An interactive multimedia presentation, the brain child of Terry Hillman, is being developed through the Murray-Darling Freshwater Research Centre.

A number of CRCFE staff also participated in the interactive, 'ecogame', *Murder under the Microscope*, which was presented by the University of Sydney in collaboration with the Opening Training and Education Network, the NSW Department of Land and Water Conservation and the Year of the Reef.

7.5 FASTS presidency

Through his presidency of the Federation of Australian Science and Technological Societies (FASTS), CRCFE Director, Peter Cullen, has been in a position to make a major contribution to the general and political awareness of scientific issues as well as to policy development. Media activities conducted through FASTS have served to heighten awareness of scientific issues, such as reduced enrolments in science courses at university level, diminishing career opportunities for young scientists and funding. This media exposure has, of course, had flow-on benefits for the CRCFE.



The Prime Minister's Science, Engineering and Innovation Council (PMSEIC). CRCFE Director, Peter Cullen (back row: third from left) holds a seat on this Council in his capacity as president of FASTS. *Photo: AUSPIC*

Activities conducted on behalf of FASTS during the year include:

- Membership of the Prime Ministers Science and Engineering and Innovation Council.
- Development of the FASTS policy document and discussions with DIST regarding its implications.
- National forum: *University Science: Crisis or crossroads?* March 19. Attended by 120 people and televised nationally as a Press Club lunch address.
- Member of coordinating committee or organise national science forum.

7.6 Communication summer student

This year's Communication Summer Scholarship was awarded to Laura Snedden, a Canberra Institute of Technology science-communication student who had previously undertaken volunteer work on the CRCFE's turtle research.

7.7 Workshops sponsored by the CRCFE

International river health conference

Hosted at the University of Canberra this international conference attracted more than

200 participants from throughout Australia as well as the USA, South Africa, England and New Zealand. Three international speakers attended: Prof James Karr, University of Washington; Prof Colin Townsend, University of Otago; and Prof Kevin Rogers, University of Witwatersrand. The outcomes of this conference will be featured in a special edition of the international journal, *Freshwater Biology*.

Science of environmental flows

The CRC, in collaboration with NSW EPA presented a one-day seminar in Sydney on December 11 on the science behind the river flow settings. This was a research seminar, and academics from a number of universities attended, as did a number of agency staff.

Carp control workshop

Researchers from the Vertebrate Biocontrol CRC and the CRC for Freshwater Ecology met at the University of Canberra during August to discuss collaborative options for carp control. The meeting, coordinated by Prof Bob Kearney, resulted in a draft proposal for a project aimed at investigating carp control options.

River restoration

Internationally respected river ecologists, Prof James Gore, presented two workshops on river restoration, one in Albury and the other at Monash University during May. The workshops

Other conferences and workshops

attracted more than 100 participants from the water industry, community groups and the research community. Prof Gore was in Australia to review the CRCFE Campaspe River environmental flows project.

AWWA-CRCFE catchment management course

The course, held February 2–4, was attended by 26 participants, covering catchment managers, community leaders, state government water agencies, regulators, local government, consultants and academics.

Taiwanese environmental officers training course

Presented in association with CRC for Water Quality and Treatment, this course provided participants with an overview of catchment and water management strategies being implemented in Australia as well as facility design and assessment. University of Canberra, March 3.

Environmental sampling and analysis workshop

Bill Maher coordinated a workshop by Dr LH Keith on the latest and future developments in environmental sampling at the University of Canberra, November 18.

Chaffey Dam workshop

About 40 staff from the Department of Land and Water Conservation (DLWC) as well as researchers from the CRC for Water Quality and Treatment attended a one-day workshop at the DLWC offices in Parramatta. The workshop was aimed at informing DLWC staff, and other stakeholders, about the outcomes of the Chaffey Dam project. The workshop also provided a forum to brief agency staff on other CRCFE activities, including the Campaspe River flows project.

Algal workshops

Dr Colin Reynolds presented three workshops on algal growth and its determinants on behalf of the CRCFE during October. The workshops held in Albury, Melbourne and Canberra were all well attended.

University of Western Sydney (Hawkesbury)

Ian Lawrence ran a workshop of Design of Ponds and Wetlands, as part of the UWS Short Course on Wetland Design.

Australian Society for Limnology Annual Conference

The CRCFE co-sponsored ASL's Albury conference which featured international guest speakers. Deputy Prime Minister, Tim Fischer opened the conference.

AWWA Environmental flows workshop

The workshop, Recent approaches to providing and assessing environmental flows, was held in Brisbane in conjunction with the AWWA annual conference during April and attended by Craig Schiller and Martin Thoms. The aim of the workshop was to evaluate the strengths and weaknesses of different approaches to environmental flows.

Improving understanding, measurement and research strategies for conservation of biodiversity in Australia

Hosted by the Special Centre for Research on the Ecological Impacts of Coastal Cities, this workshop was attended by Sam Lake, Terry Hillman, Rhonda Butcher, Richard Norris, Peter Gehrke, Ben Gawne and Chris Walsh. It was held at by the University of Sydney, April 16–17.

World Bank explores Australian water reforms

CRCFE researchers briefed about 50 World Bank experts during their visit to Australia in April. The visit was organised by the Water Services Association of Australia (WSAA) and the Murray-Darling Basin Commission.