

As indicated in Schedule 1 of the Commonwealth Agreement, the Centre has drafted a strategic plan that outlines key performance areas and links these to performance indicators. The key indicators that follow will be developed further as a part of the final Strategic Plan.

#### 9.1 Cooperative arrangements

## 9.1.1 Activities of the Centre seen by stakeholders as making a difference to water management

The Centre's ability to improve water management is recognised by a wide range of stakeholders, as shown by the high demand for the Centre's expertise from community groups, the water industry, politicians, the media and the general public.

Many of the Centre's management recommendations have been adopted via consultancies, such as the workshops and reports for QDNR on the WAMP process, the framework for the Sustainable Rivers Audit for the MDBC and the Indicators for Catchment Health for the Sydney Catchment Authority. More detail is contained in Chapter 2, Cooperative Links and Chapter 5, Knowledge Exchange.

Stream bank erosion, one of the many management issues addressed by the CRCFE's research. Photo: P Sloane



# 9.1.2 Most research undertaken in large multi-disciplinary projects managed in an integrated way

Most of the projects documented in this report are multi-disciplinary; using expertise from across the CRC to focus on problems at an appropriate field scale. We continue to invest in leadership training to help staff work in these integrated projects.

Previous page: Cooper creek floodplain at Windorah. Photo: R Ashdown



#### 9.1.3 Maintaining a strong partner base

The consultative processes used to formulate the research portfolio and develop a strategic plan have involved all the Centre's partners and served to strengthen the links between them. The Program Advisory Committees maintain a strong partner base by linking partners needs with the collaborative research programs.

#### 9.2 Research and researchers

## 9.2.1 Research portfolio appropriate to short and longer term issues for the water industry.

Our new research portfolio, developed during 99/00, targets both short and long-term issues facing the water industry. As such we have a range of projects varying from six year projects looking at scientific questions underpinning the issues facing our industry, to short term 1-6 month projects addressing immediate needs and knowledge gaps.

Program Advisory Committees (PACs) have been established for each research program to strengthen the links between industry needs and the Centre's research programs. The PACs have met and reported to the Board.

Research assistant Phil Sloane collecting habitat characteristics on the Murrumbidgee River.



#### 9.2.2 Research is of an excellent standard and is published in refereed literature.

- 43 publications in refereed journals during the year.
- All research projects undertaken within the CRC undergo a rigorous review process to ensure excellent quality science which is relevant and of benefit to our partners.

#### 9.2.3 Effective project management with regular reporting to Board

- Project management reports have been presented to each Board meeting.
- Reporting is against milestones and any missed milestones are reported and acted on by the Board.



#### 9.3 Education and training

## 9.3.1 Number of postgraduate students enrolled and working with the CRC and degrees conferred

The CRCFE has 51 PhD and 12 Masters students.

25 students approved as Associated Project students.

5 applications currently in progress from new PhD candidates.

There have been 3 Masters degrees and 8 PhDs conferred.

## 9.3.2 Involvement of non-university staff in teaching postgraduate courses and research supervision

22 postgraduate students are co-supervised by non-university staff.

#### 9.3.3 Short courses and workshops developed and presented.

The first CRCFE Postgraduate Student Workshop was held. A number of CRC postgraduate students participated in a 14 day Statistics and Experimental Design course.

A postgraduate student induction manual has been produced.

The first supervisors' training day registered 13 participants from both university and non-university CRC partners.

#### 9.4 Applications of research

#### 9.4.1 Adoption of research by partners

CRC research was adopted by partners for the development of stormwater management plans and guidelines, environmental monitoring and assessment programs, for the development of environmental policy, the identification of environmental flows in regulated and unregulated rivers, catchment management planning, fisheries management, lake and reservoir management, stream rehabilitation projects, and conservation programs.

#### 9.4.2 Advice and consultancies provided to industry partners and others

CRC staff provided advice and contributed to science and resource management issues on more than 250 occasions at a diverse array of events, including seminars, workshops, conferences, consultative and business meetings, international visits, steering committees and training sessions.

The CRC undertook 36 consultancy projects that continued the rise in annual consulting income recorded in each year of the CRC's existence (see the Knowledge Exchange section in chapter 5 for more details). The 1999/00 income was achieved despite the fact that the CRC declined many requests to undertake consulting work. Priority was given to projects commissioned by industry partners and government agencies such as Environment Australia.



## 9.4.3 Applied research, investigation and consulting contracts with non-participating agencies

Applied research and consulting projects were undertaken for non-participating agencies where such work contributed to improved water resource management or the application of CRC research outcomes and tools. This included input to work related to stormwater management (e.g. stormwater management planning, pond and wetland design), tools for assessing river health (e.g. AUSRIVAS models and biological monitoring), and evaluation of government policy initiatives (e.g. COAG water reforms, review of the MDBC Cap on diversions).

## 9.4.4 Production of technical publications appropriate for end-users and develop other vehicles for reaching these groups

Seven technical reports were produced for end-users; a number of which have been reprinted to meet demand. To broaden the access to these publications, most technical reports are available in PDF format on the CRC website. A number of less technical brochures on research findings are also produced for end users.

#### 9.4.5 Centre staff involvement in government and other advisory bodies

Most staff members actively contribute to government and other advisory bodies as an effective way of making the Centre's expertise available. The 7 members of the Management Committee alone are involved in 56 government and other advisory bodies. For further details, please see chapter 5, Knowledge Exchange.

#### 9.4.6 Media exposure by Centre

103 media hits were recorded during the year. After five years of building relationships with the media, the Centre now receives numerous requests from the media for information and interviews.

#### 9.5 Management and budget

### 9.5.1 Effectiveness of Board in setting research directions and providing overall policies for the Centre

The Board has identified priority areas for project development, and has then assessed the projects and selected those ready for funding. The Board has been closely involved with developing the Centre Strategic Plan and other operational plans.

#### 9.5.2 Reporting progress to the Board and to the Commonwealth

Direct reports to the Board quarterly.

Annual report to the Secretariat.

The Centre received a favourable report from its first year 'pastoral' visit, organised by the CRC Secretariat. The report stated that the CRC had "no significant weaknesses" and "...is already clearly focusing on and achieving all the evaluation criteria".



#### 9.5.3 Accurate monitoring of agreed performance indicators

Project management system in place and accurate tracking of performance indicators occurs.

#### 9.5.4 Deliver induction program so that all new entrants to the Centre have an understanding of the organisation, its operations and resources

An induction kit has been developed for students working in the CRC and this is available to all new students. Induction programs are offered as various sites as needed.

#### 9.5.5 Provide appropriate staff development opportunities within the Centre

Staff and students have undertaken a variety of staff development training including information technology, leadership skills and first aid. Seminar programs are run at the Monash, Griffith and Canberra University sites, open to all CRCFE staff and students. Staff and students have also been supported to attend scientific conferences and workshops.

#### 9.5.6 Significantl increase in revenues from outside sources during the life of the Centre

The revenue received and revenue per consultancy all increased significantly in 1999/2000, even though the total number of consultancies fell from 1998/99 levels and the CRCFE declined to accept a number of offers for additional work. \$1,400,000 was received from consultancies.

These figures reflect the recognition of the CRCFE as a provider of high quality, independent advice to the water industry.

