

## SEARCH CRITERIA

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|--------------------------------------|--|
| <b>Model</b>                         | Model D: Information Access                |
| <b>Industry</b>                      | Catchment Management                       |
| <b>Focus/Level</b>                   | Industry                                   |
| <b>Approach to information needs</b> | Website, CD Rom, Information centre, other |
| <b>Special Interest Groups</b>       | other                                      |

### 1. PROJECT TITLE:

Integrated information management system for catchment managers

### 2. FUNDERS:

Land and Water Australia

### 3. PROVIDERS:

LWA

### 4. Key Contacts:

*Principal Investigator*

Dr Bruce Hooper, Associate Professor of Geography, Department of Geography and Environmental Resources, southern illinois university, Carbondale. IL 62901-4514. USA. Dr Hooper was formerly a Senior Research Fellow at the University of Queensland where the Catchment Information System was developed.

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### 5.INDUSTRY/ISSUE/GEOGRAPHY:

The aim of this project was to facilitate exchange and accessibility of research and other catchment management information to and between catchment managers and researchers in a river valley. Catchment managers include: catchment management organisations (committees, associations, trusts, boards and authorities), Local Government Planners, State Government agency staff, individual land owners, agricultural merchants, environmental organisations, Landcare Group Leaders, farm financiers and property valuers and others.

There were three catchments identified to develop a prototype of the Catchment Information System (CIS) component for each field site. These were:

- Dawson Catchment
- Dee River Catchment
- Liverpool Plains Catchment

### 6. PROJECT CONTEXT:

The primary outcome of this project was the development of a Catchment Education and Information Exchange Program to integrate catchment information and facilitate information exchange in catchment management. This includes the use of catchment information systems (CIS).

Research in Australian catchments has found that one of the most powerful ways people get and share information about catchment management is by word-of-mouth...on the phone, at meetings and conferences, at the pub, in the supermarket, at agricultural field days, or in government offices. A user guide to the program has

been set up online (<http://www.catchment.com/UGhome.html>). This provides instructions on how to set up and run an information exchange program for people involved in catchment management. It was designed by Australians for Australian catchment managers. While it is intended for any catchment, the program should be tailored to suit local needs.

The information available is based on written reports, research reports, conference papers and media releases. While it might be printed, the most powerful way people share the information is talking to each other about it, both formally and informally.

#### **7.PROJECT NICHE (SPECIFIC OBJECTIVES):**

The purpose of each CIS is:

1. to provide information to valley residents on natural resources management and environmental planning (specifically agreed best management options for different land types and river stretches ie solutions for specific locations congruent with the overall catchment management); and
2. to provide improved and equal access to valley residents to information for decision making in regional planning and catchment management – through a joint discussion facility on the World Wide Web.

#### **8.PHILOSOPHY/APPROACH:**

The information access model is the basis for this project's approach. It focuses on the growing role of the internet, information CDs and distance learning.

#### **9. RESOURCES, MANAGEMENT AND STAFFING STRUCTURES:**

For the effective implementation of a CIS, a catchment Education and Information Exchange Program is needed to assist information integration and exchange. The following components are included:

- working on your information requirements
- information integration
- an interactive community education program
- catchment information centres
- a 1800 catchment phone link
- a charter on the legal issues of catchment information management
- institutional arrangements for information management
- regional libraries: safe repositories of catchment information
- Catchment Information System: interactive web pages and searchable databases and CD ROMS
- Catchment Information System: modelling and decision support
- Catchment Information System: a searchable Geographical Information System (GIS)
- Review of other experiences

#### **10.PROCESS/METHODS USED:**

The program is implemented using a training program with catchment managers based on the User Guide (found online <http://www.catchment.com/UGhome.html>).

#### **11. IMPACTS TO DATE (AND EVALUATION APPROACHES USED):**

A survey was conducted looking at implementing CIS in organisations. The project has found significant organisational obstacles to effective catchment management that are relevant to implementing CIS:

- The current organisational structure for catchment management is questionable because of the vested interest of participants

- The current institutions for catchment management are weak and uncertain. The cost and benefits for these institutions are unclear
- Catchment management needs a stronger funding base and more rigorous approaches to natural resources management planning

**12. EFFECTIVENESS:**

Results suggest that if organisations are to implement the CIS effectively they need to address fundamental organisational issues before effective information management can occur in catchment management. The reason the LWA funded this project was the need to provide a mechanism to integrate information in a way to assist decision makers. It appears that CIS can address this need, however things may be impeded until catchment management organisations are given specific powers and responsibilities and the funding and leadership to manage catchments.

**13. PROJECT DOCUMENTATION AVAILABLE:**

Short project report on LWA CD ROM

<http://www.catchment.com/UGhome.html>

**14. ISSUES:**

Other issues that the survey raised include:

- Catchment boards could be used as a structure to deliver catchment management and have revenue arising and construction powers similar to those of NSW trusts
- The need for a new organisation type to “conference” information from different research projects to identify catchment management options.
- The need to further explore a catchment management governance option based on a group of local governments with the responsibility of a regional environmental plan. This option is similar to the functions of a county council.
- There is a need to empower catchment management committees but this would require changing constitutions and acts of State Government.

**15. COMMENTS/CONCLUSIONS:**

This project has shown that unless critical institutional and organisational issues are addressed, information management for catchment managers will be difficult to implement.

**16. REVIEW METHODS:**

Reviewing available documentation

Viewing online user guide