Australian Government
Cotton Research and Development Corporation

FINAL REPORT 2008

If you are participating in the presentations this year, please provide a written report and a copy of your final report presentation by 31 October.
If not, please provide a written report by 30 September.

Part 1 - Summary Details

Please use your TAB key to complete Parts 1 & 2.

CRDC Project Number: **ANU10**

Project Title: Roll-out of the WAdss: scoping project

Project Commencement Date: 1/07/07 **Project Completion Date:** 31/03/08

CRDC Program: Integrated Natural Resource Management

Part 2 – Contact Details

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Part 3 – Final Report Guide (due 31 October 2008)

(The points below are to be used as a guideline when completing your final report.)

Background

1. Outline the background to the project.

This project sought to uncover possible future adoption options for the Water Allocation Decision Support System (WAdss) software which was developed as part of a previous CRDC funded project. Funding was requested to enable 5-6 workshops/meetings aimed at NSW and Queensland State government agencies and Catchment Management Authorities (CMAs) to encourage new applications of the WAdss approach to be developed, and adoption of already existing applications (Namoi, Gwydir) for decision and policy making. This was a scoping exercise from which a direction for increasing uptake and adoption of the WAdss method and software has been sought.

Objectives

2. List the project objectives and the extent to which these have been achieved.

The project objectives were to: create awareness of the WAdss software and approach amongst CMAs in NSW and Queensland to encourage further applications to be developed; and, to increase acceptance of the WAdss approach by State government so that the existing applications in the Namoi and Gwydir and potential future applications may be better used for management purposes.

These objectives have both been met. Contact was made with all relevant CMAs in NSW and Queensland as well as with relevant State Government agencies. Meetings were held with: the Central West CMA in Dubbo; the Queensland Murray Darling Committee, NSW Department of Environment and Climate Change; Queensland Department of Natural Resources and Water; and the Murray Darling Basin Commission. Interest was expressed in two new areas for applications: the Central West in NSW and a prototype application to test the feasibility of using the system more widely in Queensland. Discussions about these new applications are on-going. Less success was had in discussions about the existing DSS. Relevant agencies in both the Namoi and the Gwydir catchments were contacted repeatedly about the possibility of a presentation and follow-up meeting but little interest was shown in hosting a workshop or meeting. The discussions which are continuing with MDBC about the possibility for new applications also include the potential for further developing the Namoi and Gwydir DSS and using these as a tool to enhance communication between irrigators and the relevant government agencies. This provides a possible pathway for greater use and adoption of the DSS for these catchments which is currently being further investigated.

Methods

3. Detail the methodology and justify the methodology used. Include any discoveries in methods that may benefit other related research.

Contact was made with a range of State Government and CMA staff relevant to the Central West catchments, Namoi and Gwydir catchments, and Condamine Balonne system (as well as other systems in western Queensland). In each case background material on WAdss was sent and phone and email contact inviting the organising of a meeting or workshop was entered into. Where workshops did not have adequate support from a relevant agency they were not held. For example, in one case irrigators were sent notice of the possibility of a workshop by CMA staff but no CMA staff expressed any interest in facilitating a meeting so no workshop was held. This was done to avoid raising hopes and expectations amongst irrigators in regions where insufficient support or interest was forthcoming from relevant government agencies and CMAs. Follow-up work will be done at a later date to engage irrigators where there is a high likelihood of funding being acquired. In the case of Central West, staff at the CMA indicated that they would engage in discussions with irrigators and other local stakeholders before progressing with any application to ensure the approach had broad based support. Staff present at presentations made suggestions as to others that should be contacted. Follow-up contact was made with these people and in several cases meetings were held to discuss the WAdss

and its potential for application to their issues of concern. Meetings typically involved a presentation of background on the WAdss, a demonstration and explanation of the software system and a facilitated discussion of potential adoption of the approach. Feedback and discussions were documented.

Results

4. Detail and discuss the results for each objective including the statistical analysis of results.

   a) To create awareness of the WAdss software and approach amongst CMAs in NSW and Queensland to encourage further applications to be developed

   Meetings held with Queensland DNRW in Brisbane and Toowoomba and with staff from QMDC indicated that there was strong interest in developing a prototype application of the WAdss system in a Queensland catchment. This prototype would act as a trial for a larger roll-out of the approach in Queensland if the system is shown to successfully capture the issues relating to water allocation and access in this State. This application is also supported by the MDBC. Discussions are underway about potential funding and scope for such an application.

   A meeting was also held with regionally based State Government Agency staff and CMA staff hosted by the Central West CMA. This group indicated that they were interested in having further discussions with their stakeholders to see whether there would be support for an application of the WAdss in their region. Enthusiasm was expressed by those present for an application funded through the CMA but which involved all relevant agencies and irrigators. Potential uses for such an application were discussed.

   b) to increase acceptance of the WAdss approach by State government so that the existing applications in the Namoi and Gwydir and potential future applications may be better used for management purposes.

   Meetings were held with DECC staff in Queanbeyan. These staff expressed interest in being involved in any future applications or developments of the WAdss and were particularly interested in further developing its capacity to consider ecological impacts.

   As discussed above, meetings were also held with QDNRW staff in Toowomba and Brisbane. These meetings were very successful with staff expressing enthusiasm for a trial application of the WAdss.

   The WAdss was also presented to around 50 staff at the MDBC. Discussions are on-going with Richard Moxham, the Senior Manager of the Northern Basin about the potential for using existing applications in the Namoi and Gwydir and potential future applications in Queensland and NSW to improve communication between irrigators and government agency staff and to develop a tool that is widely accepted for policy and decision making. A follow-up meeting has been planned to progress these discussions in late May 2008.

Outcomes

5. Describe how the project's outputs will contribute to the planned outcomes identified in the project application. Describe the planned outcomes achieved to date.

This project has increased awareness of the WAdss to CMAs, State Government agencies and MDBC staff operating in NSW and Queensland. This has successfully generated interest within these groups for developing and implementing new WAdss applications. To a much lesser extent it has been successful in generating interest in uptake of the WAdss currently available for the Namoi and Gwydir river systems. It currently seems likely that Queensland will trial the approach and may adopt it for their planning and strategic decision making purposes if this trial is successful. It also seems likely that the MDBC may encourage further uptake of the approach in NSW and that a separate application may be developed in the Central West.

6. Please describe any:-
   a) technical advances achieved (eg commercially significant developments, patents applied for or granted licenses, etc.);
   b) other information developed from research (eg discoveries in methodology, equipment design, etc.); and
   c) required changes to the Intellectual Property register.

None

Conclusion

7. Provide an assessment of the likely impact of the results and conclusions of the research project for the cotton industry. What are the take home messages?

The awareness raising aspect of this project has been very successful and looks like it could generate substantial uptake of a method for water allocation and access planning that directly involves irrigators and the industry in its development. Providing additional funding to allow for these types of discussions to occur has been very fruitful and the outcomes achieved so far (which are on-going) would not have been achieved without these additional resources. The timing of this work also seems to have been a factor in the positive response received to date.

Extension Opportunities

8. Detail a plan for the activities or other steps that may be taken:
   (a) to further develop or to exploit the project technology.
   (b) for the future presentation and dissemination of the project outcomes.
   (c) for future research.

The awareness raising activities funded by this project have led to several possible future extensions. A meeting has been arranged in Canberra with the MDBC to further discuss possibilities for funding a prototype application in Queensland and to progress the idea of using the existing DSS to enhance communication between State Govt and CMA staff and the irrigators. It is expected that this meeting will lead to further discussions with representatives of both the NSW and Queensland governments.

Further discussions are also planned with the Central West CMA to follow-up on their interest in developing an application. This may be a separate stand-alone project or may fit well with other plans linking to the MDBC option. These options will be discussed and follow-up meetings will be arranged as necessary.

8. A. List the publications arising from the research project and/or a publication plan.
   (NB: Where possible, please provide a copy of any publication/s)

   None

   B. Have you developed any online resources and what is the website address?

   None

Part 4 – Final Report Executive Summary

Provide a one page Summary of your research that is not commercial in confidence, and that can be published on the World Wide Web. Explain the main outcomes of the research and provide contact details for more information. It is important that the Executive Summary highlights concisely the key outputs from the project and, when they are adopted, what this will mean to the cotton industry.

The Water Allocation Decision Support System (WAdss) was developed to allow the social, economic and environmental trade-offs of water allocation, access and pricing decisions to be assessed concurrently across both groundwater and surface water systems. This development was funded by the CRDC. Systems exist for the Namoi and Gwydir Valleys. Workshops have previously been run with regional State Government Agency staff, CMAs and irrigators on these systems. Considerable interest was expressed during these workshops in the approach however since that time little progress has been made on ensuring adoption of these systems in these Valleys. One block to further adoption is acceptance of the approach by State Government. At least two factors have limited this adoption in the past: State government staff were not in a position to take up the approach given uncertainty in roles and responsibilities with major restructuring of Government Departments underway; and, the approach needed to be applied more broadly across the State to be part of a State wide decision making, policy or planning approach. This project aimed to raise awareness of the WAdss method in NSW and Queensland and to scope out the potential for greater use of the existing WAdss applications and possibilities for the development of new applications. Meetings have been held with interested agency and CMA staff in NSW and Queensland, and potential future avenues for adoption and new applications have been identified.