

# Building effective climate risk management in the Western Australia grain belt

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**Location:** WA grain belt

## Principal investigator

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## The need

There is a clear need for definitive research on WA farmer knowledge, attitudes, skills, aptitudes and current practice (KASAP) in relation to climate risk management in the agricultural regions of WA. There is a similar need to evaluate the effectiveness and delivery of current extension packages and the extent to which they meet the needs of farmers and landholders. Finally, there is a need to develop and deliver an integrated package of information, tools and training that targets these needs in terms of content, timing and delivery. This project is working to achieve these goals.



## How this project fits with MCV objectives

This project, with its strong focus on increased adoption through understanding land manager needs, and developing and trialling improved extension vehicles, both to farmers and through the supply network, is entirely consistent with MCV's objectives.

## Project objectives

1. Establish the level of WA grain belt farmers' and landholders' climate risk management (CRM) needs, drivers and barriers to adoption of CRM in a 'whole of farm' management context
2. Build the CRM capacity of the supply network from researcher to farmer
3. Develop and deliver an integrated package of information, tools and training that targets these needs in terms of content, timing and delivery, through several geographically and farming system distinct farmers groups and selected supply network intermediaries

## Methods

While, for purposes of definition, the project has been divided into two distinct phases, some aspects of each phase are proceeding concurrently. In addition, as feedback is received from the outcomes of the later phase, these will be fed back to the earlier phase in a process of continuous improvement.

### Phase 1 – ‘needs’ definition

- Undertake an in-depth study of WA grain belt landholders’ KASAP (literature review, focus groups, and a random survey of farmers across the WA grain belt)
- Work with Murdoch University to design and apply a strategy to achieve behavioural change in CRM, using theories of environmental education and self regulation of learning

### Phase 2 - delivery evaluation, development and capacity building

- Develop strategies and action plans based on the outputs from Phase 1

These include CRM and ‘Risky Business’ workshops targeted initially at advisory staff, consultants and agribusiness; ‘Farmers Assessing Climate Risk Information’; a ‘Horses for Courses’<sup>1</sup> type delivery program targeted at farmers across the WA grain belt; and trials of several new/enhanced CRM information products.

## Desired outcomes

- A significant number of farmers across the grain belt with substantially enhanced knowledge, attitudes and skills in relation to CRM and the ability to apply decision support tools and climate information to better manage climate risk
- A similarly enhanced knowledge, attitude and skills of agribusiness, consultants and advisors, providing an improved capacity to positively influence CRM practice change in the broader farming community in the shorter and longer term

## Achievements to date

The needs analysis phase is underway and an in-depth random survey of over 300 grain and livestock farmers across the WA grain belt has commenced. Planning is well underway for the delivery of ‘Farmers Assessing Climate Risk Information’ for the 2006 cropping season.

## What is left to do?

The outputs of the first two phases of the project will determine our final approach to farmer capacity building and, until those phases are well underway, it is not appropriate to be prescriptive about the content of ongoing capacity building in the longer term. However, we believe it likely that this project will provide a significant catalyst for changing the way in which we work with the farming community to assist them in managing the risk associated with seasonal variability.

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<sup>1</sup> Weeks, C. (2005). Horses for Courses – using the best tools to manage climate risk. Agribusiness Crop Updates 2005, Perth, Western Australia, Department of Agriculture, WA.

MCV is a collaborative program between the Grains, Rural Industries and Sugar Research and Development Corporations; the Australian Government Natural Heritage Trust and Department of Agriculture, Fisheries and Forestry; Dairy Australia; Meat & Livestock Australia; and Land & Water Australia. The National Farmers Federation and Australian Wool Innovation Limited are associate partners.

For more information on MCV, visit <http://www.managingclimate.gov.au>  
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