

# SMARTER IRRIGATION FOR PROFIT



## Maximising Irrigation Profitability

### Aim of the project

To develop sustainable broadacre irrigation systems that increase the profitability and flexibility of farming systems in the southern Murray Darling Basin.

The project will:

1. Assess the ability of precision irrigation to apply defined irrigation depths on time and determine its potential to reduce deep drainage and waterlogging risk, and increase nutrient and water productivity; and
2. Develop irrigation design criteria to allow precision irrigation to occur on basin irrigation layouts.

### The methodology provides three key areas of focus within the project:

**Agronomy;** the influence of irrigation layout and management on input efficiencies, particularly nitrogen and subsequent impact on water productivity and system profitability.

**Hydrology;** to gather information on the impact of factors such as slope, bay surface roughness and soil type on water infiltration, and then validate these factors to develop the irrigation layout design criteria.

**Communication/adoption;** utilisation of grower groups to ensure project activities are meeting grower needs, local demonstration of activities, collection of relevant data.

### 2015/16 Activities

Benchmarking of commercial layout performance

Establishment of key grower learning sites

### Project partners

Murray and Riverina LLS

Rice Extension

CottonInfo



#### IREC, Whitton – Back to back cotton:

What is the effect of reduced deficit irrigation on NUE and WUE in southern irrigated cotton?



#### SG, Jerilderie – Intensive double cropping in a rice rotation:

Is continuous double cropping a possible alternative to increase productivity and profitability of the rice farming system?

What are soil and nutrient constraints to winter crop production following rice?

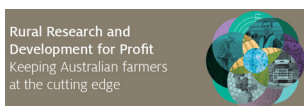


#### ICC, Numurkah – Automated surface irrigation:

What is the influence of N management and reduced deficit irrigation on NUE and WUE on alternate summer crops?

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