

Promoting Water Smart Infrastructure Investment in NSW

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Background:

In the face of further reductions in water availability (under the proposed Murray-Darling Basin Plan) the impact of climate change, and increasing costs of energy, irrigators will need to improve their water productivity and energy efficiency.

Some changes to irrigation infrastructure will take place, and this project gives cotton irrigators the best chance to make informed decisions about investing in irrigation infrastructure to improve water use and energy efficiency.

Project Objectives:

This project will improve industry capacity to adopt best management practice and improve water use and energy efficiency, through the provision of training, technical support and extension material.



Project Activities:

Irrigation Training

NSW DPI PROwater® workshops will be delivered to assist irrigators in their infrastructure planning decisions and ensure they have the ability to manage any new infrastructure they adopt.

PROwater® Modules include:

- Soils and irrigation
- Surface irrigation systems
- Centre pivots and lateral moves
- Drip irrigation
- Irrigation scheduling
- Benchmarking and water budgeting
- Irrigation pumps
- Water metering
- Storage and distribution systems



Centre Pivot and Lateral Move (CPLM) Review

Interest in CP and LM irrigation systems has increased. They require a significant capital investment and often new management skills. The review will:

- Identify the perceived benefits and limitations associated with the use of CP and LM irrigation systems.
- Capture the experiences of irrigators operating CP and LM machines
- Increase grower understanding of the management practices required to use the technology successfully.



Establish irrigation benchmarks

- Benchmark irrigation water use efficiency in terms of bales per ML for the Australian Cotton Industry (2012/13 season)
- Irrigation data will be collected from irrigators located from Hillston to Emerald and using Watertrack Rapid™ irrigation benchmarks will be established.
- Irrigators will be able to compare their performance with regional and industry averages.



Establish energy use benchmarks

- In collaboration with the National Centre for Engineering in Agriculture, NSW DPI will conduct on-farm energy assessments using the NCEA energy benchmarking tool EnergyCalc.
- The purpose of an energy assessment is to identify where, and how efficiently energy is used and to explore ways to reduce energy use and costs.

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