



## Case Study

2013 CSD  
Researcher of the  
Year RECIPIENT

**Janelle Montgomery**  
**Irrigation Extension Delivery Officer**  
**NSW DPI**  
**Moree, NSW**

Janelle Montgomery's cotton industry career spans almost 20 years, during which time she's made a major contribution both as a cotton researcher and extension/delivery officer. Janelle has made an outstanding contribution to the national cotton effort to improve water use efficiency by stimulating practice change and improving the knowledge of growers, consultants and researchers. She is the longest serving regionally based cotton extension officer living in a cotton town.

Janelle's career started with a Cotton CRC funded PhD studying the soil water balance for irrigated cotton. This was one of the early "deep drainage" studies that later led to the cotton industry's renewed interest in deep drainage science, and subsequently improvements in irrigation management.

After completing her PhD, Janelle worked as a Research Fellow with UNE, leading a project that studied water quality, soil salinity and birdlife on about 16 farms in the Gwydir Valley. The work was the first on farm robust study of storages and showed there were 42,000 birds, representing 45 species, including some rare birds found on those farms. This remains one of the very few on farm bird surveys providing evidence that there are abundant birds on cotton farms.

Between 2006 to 2013, Janelle championed water use efficiency and productivity gains in cotton as an Irrigation Extension/Delivery Officer with NSW DPI across the entire cotton industry. CRDC has funded her position through three projects:

1. Advancing Water Management, NSW
2. Water Smart Cotton and Grains
3. Promoting Water Smart Infrastructure Investment, NSW

Janelle is a great collaborator and has linked with groups across the cotton industry from her base in Moree on projects such as water use efficiency benchmarking, consultant training, Irrisat technology, on-farm energy assessment, water storage evaporation mitigation, deep drainage management, surface irrigation optimisation, alternate irrigation systems evaluations, extension activities, field days, magazine articles and industry publications such as WATERpak.

Janelle's beneficial outcomes for the cotton industry are in four broad areas:

- Establishment of irrigation benchmarks for the Australian Cotton Industry, providing vital industry data. Janelle and her team have measured, and benchmarked water use on farms from Emerald to the Murrumbidgee.
- Increased knowledge and adoption of best irrigation management practice and training of consultants and growers.
- Adoption and increased awareness of new WUE technologies
- Initial studies for on-farm energy use monitoring and measurement

