

The National Program for Sustainable Irrigation and its predecessors have invested in irrigation research for nearly two decades covering topics at the field, farm and catchment scales; and issues ranging from storage and delivery to on-farm application, environmental risks and recycling. A team was commissioned to 'harvest' the information and insights from across that research and the resultant reports are now available.

The main Knowledge Harvest products are:

Overview

- Vital role for Australian irrigation
- Irrigation in Australia: Facts and figures
- Planning tools: Future scenarios and ecological risk assessments
- Water use efficiency

Delivery systems

- Modernisation: Enhancing water supply systems.
- Modernising Irrigation Forum DVD

On-Farm

- Irrigation Essentials: Research and innovation for Australian irrigators

Recycling

- Using recycled water for irrigation

KNOWLEDGE HARVEST PRODUCTS

Vital Role for Australian Irrigation (PN22081)

An overview of the growing global demand for food, the importance of irrigation in meeting that demand, and the competition between different users for increasingly scarce water resources. Australian researchers and irrigators have a vital role to play in promoting global food security.



Irrigation in Australia: Facts and figures (PN22088)

Facts and figures about irrigation and water use in Australia. Basic information of the type needed for a sound discussion of the future of irrigation in Australia.

Planning tools: Future scenarios and ecological risk assessments (NPSI-3-09)

Insights into methods to assess the ecological risks of irrigation and to contemplate the future of irrigation regions – their supply systems, water use, industries, environments and communities. Tools to help industry and regional groups plan for the future.

Water use efficiency (NPSI-4-09)

Definitions and explanations of water use efficiency at scales from catchment, to delivery system, to on-farm. The generic term 'water use efficiency' is often used without exploration of associated concepts and differing interpretations, however, these are clearly explained in this report, making it a primer for conversations about irrigation.

Modernisation: Enhancing water supply systems (NPSI-2-09)

Key insights from recent programs to rehabilitate and automate irrigation supply systems and a summary of issues affecting modernisation which is a key to ensuring there is sufficient water for irrigators, urban users and the environment. Research needs are discussed and these highlight the importance of flexible systems for a dynamic future.

Modernising Irrigation Forum DVD

A DVD of field and workshop presentations from a national forum about irrigation modernisation. Snapshots of the latest research and its applications for modernisation provide a ready introduction to the latest information on this crucial topic. See <http://npsi.gov.au/products/pn30149> and <http://npsi.gov.au/products/pn30150>.

Irrigation Essentials

(NPSI-I-09)

A compendium of research findings to improve on-farm irrigation efficiency, presented in the form of 11 essential ingredients for sustainable irrigation. These principles will assist all irrigators

and advisors, and the report provides readers with signposts to information that is more issue, commodity or regionally specific.

Using recycled water for irrigation

(PN30123)

An overview of issues associated with recycling water, along with information about the challenges and opportunities involved and directions to commodity-specific guidelines. Useful information for anyone interested in recycling water, whether they be policy makers, community members or irrigators.

About the NPSI Knowledge Harvest

The NPSI Knowledge Harvest brings together information from across the National Program for Sustainable Irrigation (NPSI) projects, highlighting key findings and promoting wider understanding.

Key themes within the Harvest are:

- Irrigation Overview – facts, figures and key concepts about irrigation.
- Water Delivery Systems – the efficient storage and distribution of water for irrigation.

- On-farm Irrigation Essentials – principles for efficient irrigation.
- Recycled Water – recycling treated effluent and stormwater for irrigation.

This note provides an overview of the main products from the Harvest.

Other documents in the series may be downloaded from www.npsi.gov.au

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* Land & Water Australia was a partner until the end of July 2009.