

SOLUTIONS

To Meet the Water Challenge

Worldwide, we face a challenge in providing water for competing demands – a challenge that requires us to balance the trade-offs between water for production and water for the environment.



Whilst Australia is introducing pioneering water reforms and is a world leader in the use of resource economics for natural resource management, much more knowledge is needed in understanding the hydrological impacts of our water use decisions.

With its unique integration of leading-edge science embracing a broad range of disciplines, CSIRO is working to address the complex problems linked to land and water use, water management and water quality. We bring with us a knowledge of the impacts of land management and water use on our rivers, estuaries and catchments – impacts that include groundwater recharge, salinity, erosion, river turbidity, altered flow regimes, nutrient leakage, and acidity.

In our quest to provide holistic solutions to the competing demands for water, CSIRO research is building a greater understanding about the links between agriculture, land use and water quality. Driven by the need for regional and catchment-scale solutions, we are especially interested in the impacts of resource decisions on ecosystem functions and production systems.



CSIRO Land and Water works in partnership with government, industry, regulatory bodies and regional authorities to provide sustainable solutions to Australia's water challenges.

With access to expertise across CSIRO, we offer world-class research and consultancy services that encompass the multi-disciplinary aspects of water. Our research team has capabilities that span surface and groundwater resources, water quality, associated ecosystems, salinity, environmental allocation and urban water supply.

Our focus is to seek integrative solutions to fundamental questions about water use:

- What are the impacts from land use and land management on our rivers, catchments and groundwater?
- How do we biophysically restore rivers and landscapes in an economic and socially acceptable way?
- How do we achieve a balance between the competing demands for water from industry, community and the environment – water supply, water allocation, and water use efficiency?

CSIRO Land and Water offers sound sustainability science to underpin solutions and inform the development of natural resource management policy and government investment decisions. We also have modelling capability, decision support systems and tools to guide institutional options and infrastructure investments.

CSIRO Research Capabilities

- Integrated Catchment Science
- Sediment and Nutrient Modelling
- Groundwater Sustainability
- Salinity Processes and Management
- Integrated Catchment Modelling
- Social and Environmental Justice in Water Allocation
- Organisational and Institutional Analysis
- Catchment Water Balance and Catchment Solute Balance
- Resource Economics and Policy Analysis
- Sustainable Urban Water Systems
- Water Re-use
- Surface and Groundwater Interactions
- Algal Dynamics
- Water Trading
- Water Quality.

Contact for further information:

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