

CASE STUDY OF IMPACT
March 2015



Successfully managing Australia's precious water resources

We are helping Australia to maximise the value derived from its water resources. Our research is informing water planning, management and investment decisions.

The challenge

Australia's demand for water continues to rise with our growing population and the expansion of water intensive industries such as mining and agriculture.

Robust information is needed for sound water allocation decisions to ensure resources are sustainably managed for industry and the environment.

The response

CSIRO conducted a series of comprehensive water resources assessments in the Murray-Darling Basin, northern Australia, south-west Western Australia, and Tasmania; plus assessments in the Great Artesian Basin, and the Flinders and Gilbert River catchments. We found water development opportunities and constraints under a range of scenarios.

CSIRO is the only organisation in Australia, if not the world, that has the breadth and depth of research capability at this scale – particularly with our specific focus on integrated river basin modelling.

The engagement

CSIRO worked extensively with industry, all levels of government, universities, and community groups, and collaborated with the Bureau of Meteorology and Geoscience Australia to identify how much water there is, when and where.

Results have been incorporated into state and local water planning, and informed trading, management and investment decisions. For example they provided the confidence needed to allocate additional water under the Gulf catchment water resources plan in Queensland.

We also contribute to global water security. In partnership with the Australian Department of Foreign Affairs and Trade, we are assessing water resources in Bangladesh and planning expansion to other areas of South Asia to inform critical water management in the region.

The impact

Our water resource assessments provide regulators with the confidence they need to make sound water allocation decisions, and provide security of access against which investment can be made.

For the first time we know how much water there is, when and where.

An economic assessment of just two of many major water management decisions informed by CSIRO research (Murray-Darling Basin and the construction of irrigation schemes across Tasmania) estimated benefits of between \$685–795 million and \$1.24 billion¹.

Because of our efforts, Australia now has a nationally consistent framework for assessing water resources, covering 72 per cent of total water for agricultural use.

¹ ACIL Allen Consulting, 2014. *CSIRO's Impact and Value – An Independent Assessment*.

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AT CSIRO WE SHAPE THE FUTURE

We do this by using science to solve real issues. Our research makes a difference to industry, people and the planet.
WE ASK, WE SEEK, WE SOLVE

FOR FURTHER INFORMATION

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