

Bureau of Meteorology Submission to the Inquiry into progress with the reform of Australia's water resources sector

The Bureau of Meteorology is Australia's national weather, climate and water information agency and welcomes the opportunity to make a submission to the Inquiry into progress with the reform of Australia's water resources sector.

Bureau's water information role

Under the *Commonwealth Water Act 2007* the Bureau has responsibility for gathering and managing Australia's water data, and for compiling and delivering comprehensive water information to the nation. The Bureau's role is to collate information and assess and report on the availability, condition and use of water resources in Australia. This information informs public policy, programs and practices for better management of the nation's water resources. The Bureau also makes available to the public standardised data with national coverage that underpins a range of water resources analyses and assessments. The ongoing nature of the Bureau's water information functions will allow it to support future water reform-related information needs.

Water Policy Reform

The Bureau's national water information role promotes efficiency and transparency through national data collation and standardisation, central analysis and delivery of value-added products and services, and provision of open access to water information products and the underlying data. In 2015 the Centre for International Economics assessed the annual benefits from the Bureau's existing water information products as being worth between \$67 million and \$287 million.

Water Resource Accounting - The National Water Account

Since 2010 the National Water Account has provided open and standards-based reporting on water sourced and supplied across key water-using regions, including available water, groundwater extraction, water use in irrigation, and water trading. The value of this expanding time series of National Water Accounts is being realised through identification of trends in water availability, use and management under annually varying conditions.

The National Water Account sits alongside complementary products from other Commonwealth agencies to provide detailed analysis on water use. We plan in 2017/18 to provide a parallel National Water Account and Water Account Australia (led by the Australian Bureau of Statistics) for a selected region to clarify and promote the benefits of both, individually and in tandem.

Water Markets and Trading – access to information

In March 2017 the Bureau released a new online water markets information dashboard (http://www.bom.gov.au/water/dashboards/#/water-markets/national/state/at) with improved public access to weekly-updated information used to support trading decisions. This replaces information previously made available on the national water markets website since 2010.

In support of improved efficiency of our water markets, the dashboard makes standardised, nationwide information available from one source. The dashboard is based on data collected from



state agencies and large rural utilities, with significant effort put into streamlining, storing and then making data nationally consistent. Through the dashboard people view and compare volumes and prices of water entitlements and allocations being traded in Australia. They also view the number and volume of entitlements that are on issue nationally.

Investigation undertaken to inform the 2016 Functional and Efficiency Review: Murray-Darling Basin Authority and water-related functions within other Commonwealth entities highlighted the multiple entities with interests in the use, reporting and publication of water markets and trading data and information. One future opportunity that would assist in collating, standardising and publishing nationally consistent markets and trade data is to establish standards or guidelines for the description and provision of these data.

Urban water services

In support of openness and transparency in the urban water sector the Bureau compiles and publishes the *Urban National Performance Report*. This is an annual, independent benchmark of pricing and service quality of Australian urban water utilities. The report is published on behalf of the regulators and lead water agencies in each State and Territory. The 2015–16 report was the eleventh in the series and the third to be compiled by the Bureau. It compared the performance of 86 urban water service providers, comprising 79 water utilities and councils and seven bulk water suppliers.

Future Water Reform - climate change and extreme events

The Bureau has experience and capability relevant to supporting future water reform information needs on climate change and extreme events. We manage reference networks fundamental to detecting changes along with forecasting and projection capabilities. In partnership with CSIRO and others, our experience includes:

- 27 years contributing to the Australian Climate Change Science Programme (ACCSP);
- current work in the National Environmental Science Programme (NESP) Earth Systems and Climate Change Hub;
- production of Australia's authoritative 'Climate Change in Australia' information; and
- regional-scale analysis of hydro-climatic impacts, such as through the Victorian Climate Initiative.

We have the capability to provide consistent national information to support strategic and operational planning and investment in water resources and associated infrastructure.

Future opportunities - reliable operational information on environmental watering

The Bureau's operational capability in river flow and water storage information has the potential to underpin a national capability to report on the availability and distribution of environmental water, should such a need arise as part of future water reform developments.

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