

# Water information in Australia: from research to use

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**Abstract:** This year's El Nino is the first since 2009 when Australia was in the grip of the millennium drought. Much has changed in Australia's water situation since 2009, including the availability of information on the national situation. The paper will briefly outline the progress made in water information; how it has drawn upon climate and water research; and how the information services are being used in various sectors.

The national interest around water has also evolved since 2009, and now has a focus on topics such as agricultural productivity, new water resource infrastructure, sustainable cities, developing northern Australia, groundwater, and adapting to climate change. These present new challenges for water information services requiring additional research and development of new technologies. The paper will outline needs that have been identified in areas such as: scenarios of future flows to inform planning and infrastructure investments; remote sensing of landscape water balance; and modelling and forecasting of landscape water balance.

The case for research in these topics is hampered at times by short term imperatives to secure funding and have current knowledge applied to decision making. How we deal with uncertainty in modelling and limitations of knowledge is critical, for example. There needs to be a balance between making the long term case for research while meeting short term calls for useful results and meeting budget shortfalls.

**Keywords:** *Hydrological modelling, applications of hydrology, research priorities.*