




# water information


Data  $\curvearrowright$  Information  $\curvearrowright$  Insight

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*IRRIGATION AUSTRALIA 2008  
Stream 1 – Water Policy and Reform  
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**Outline.**

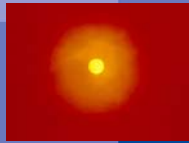


- Why the need for information?
- Scope of the Bureau's new role
- Our information products
- Where we are up to in planning



Australian Government  
Bureau of Meteorology

## Water scarcity: A deepening problem.



Drying & Warming Climate



Growing Urban Demand



Satisfying Irrigation Demands



Uncapped Groundwater Extraction

The big  
**8**

water scarcity factors



Expanding Plantations



Expanding Farm Dams



The Environmental Flows Imperative



Bushfire Recovery Impacts



Australian Government  
Bureau of Meteorology

## Sustainable water resources management

Judicious infrastructure investments

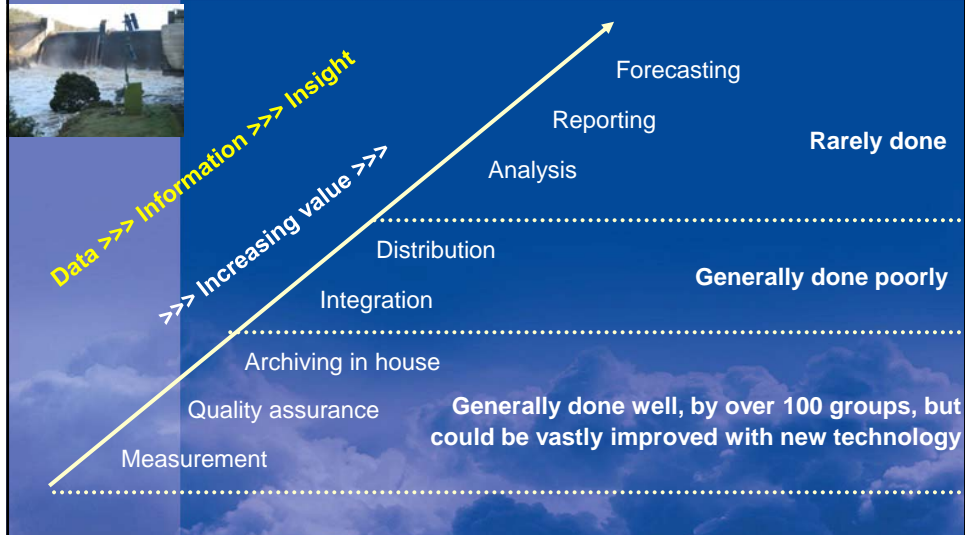
Properly  
functioning  
water  
markets

**Good  
water information  
is the key**

Prudent  
environmental  
flow  
management

Fair pricing and equitable sharing of a scarce resource

## The water information value ladder.



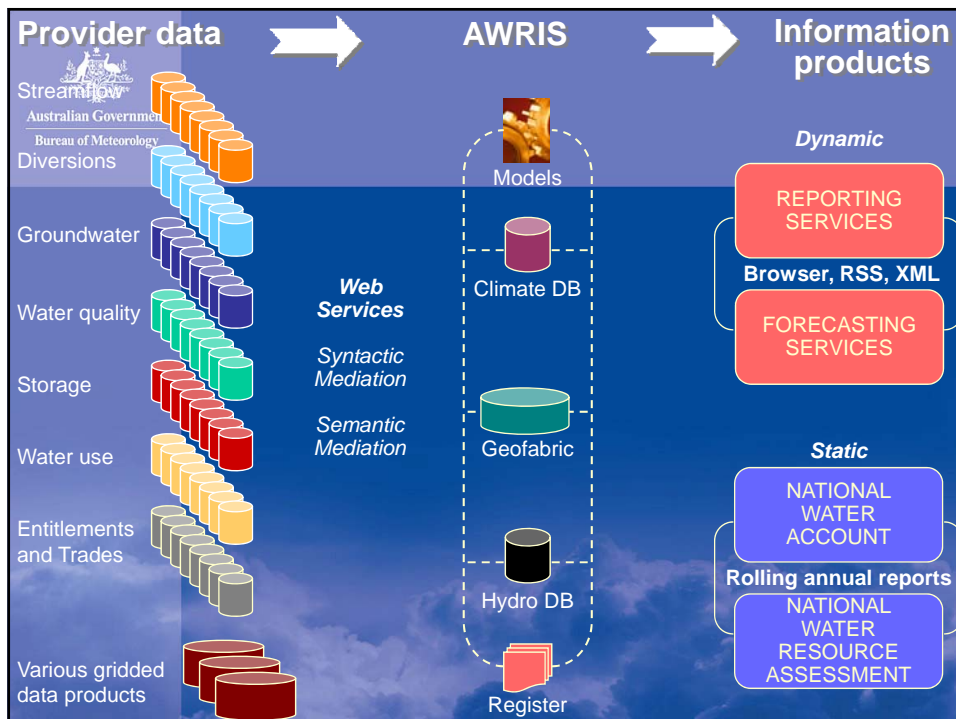
## Goals viz water information.

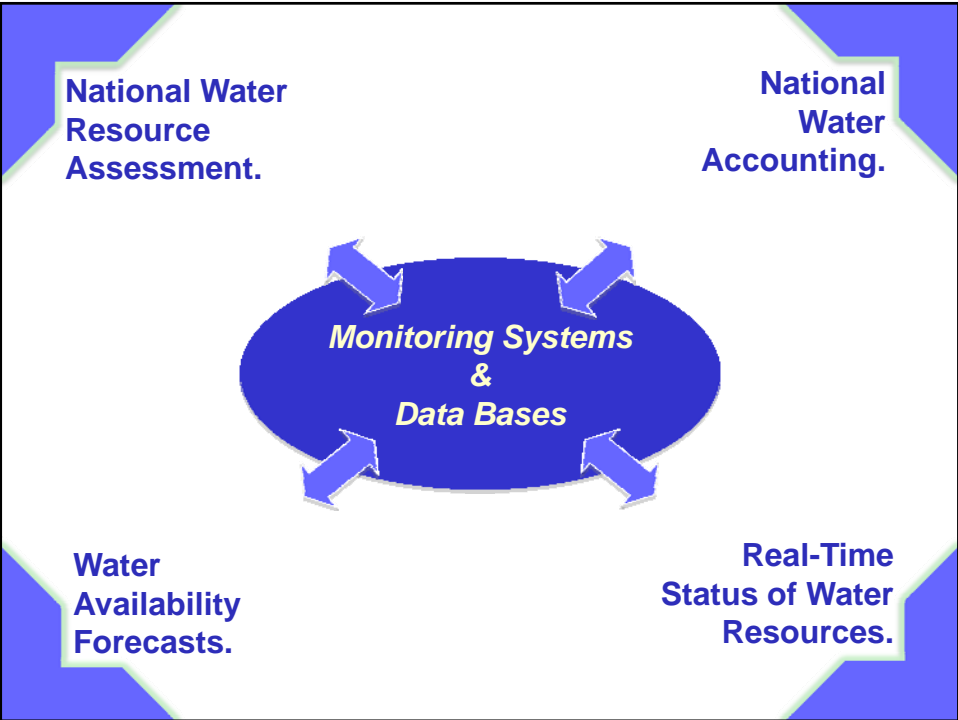
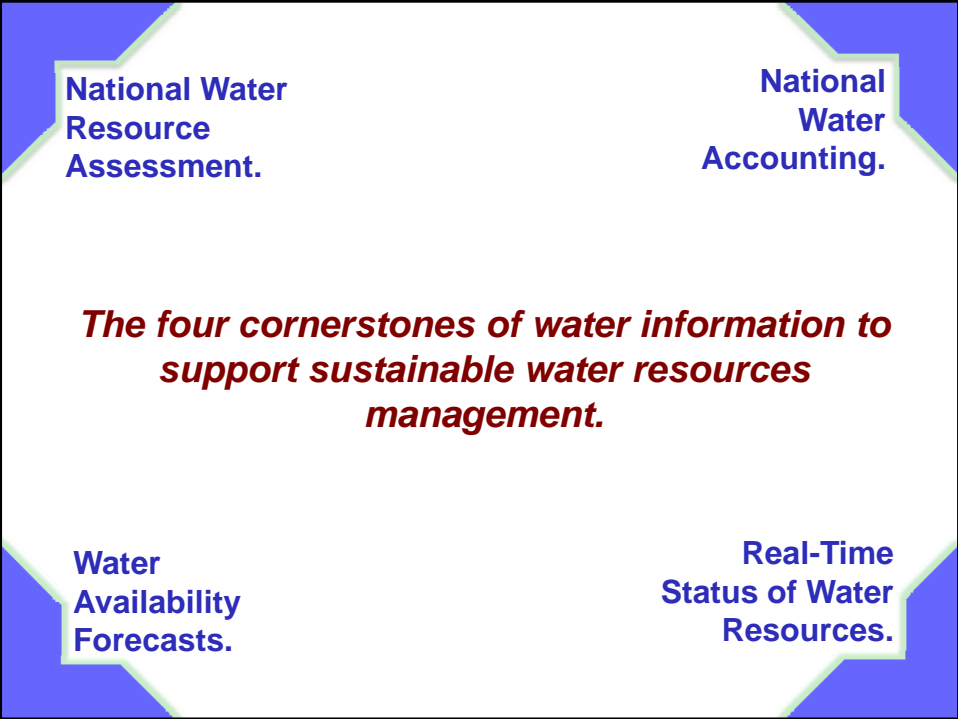
- Support for the National Water Initiative (NWI).
- Provide an improved basis for making informed policy decisions and infrastructure investments.
- Enable governments to evaluate progress being made in water reform.
- Ensure transparency, independence and rigour in managing water information.

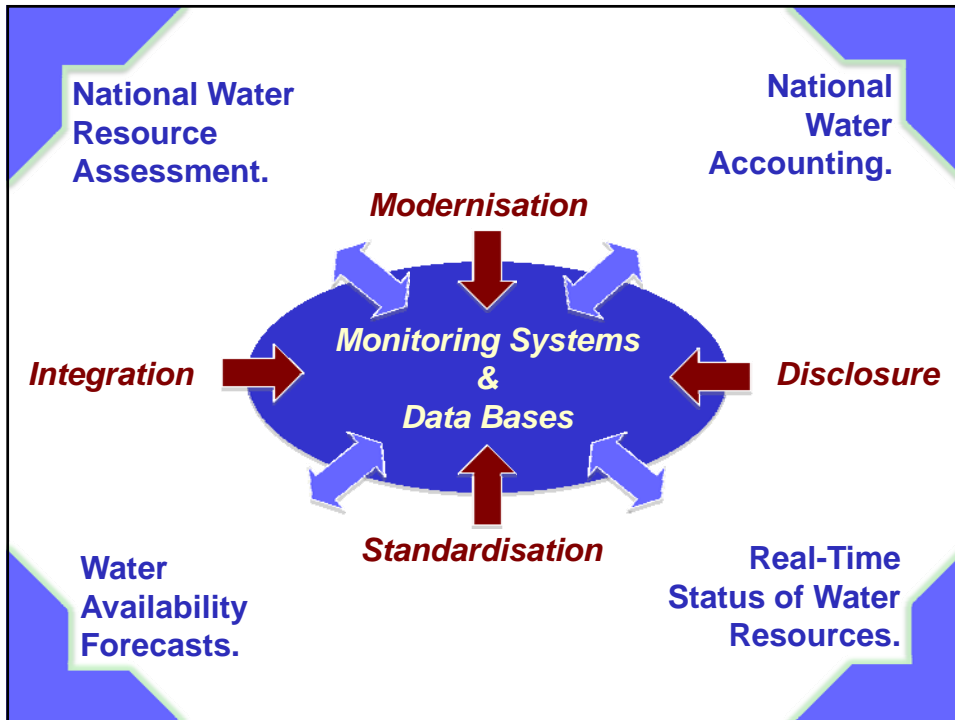
## The Bureau's new role.




1. Set standards for water data measurement and transmission.
2. Aggregate water information and make it freely available via the web, with value-added analyses.
3. Conduct annual national water resource assessments.
4. Produce an annual national water account.
5. Provide continuously updated water availability forecasts.










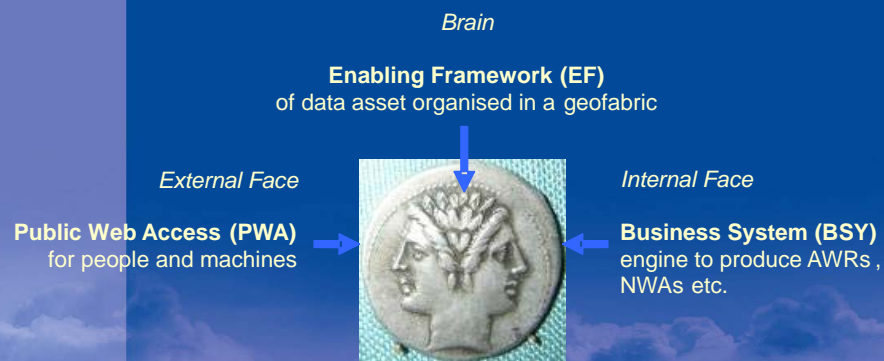
Australian Government  
Bureau of Meteorology

## Improving State observing systems.



- The Bureau won't make observations beyond current meteorological monitoring, but has ...
- \$80m to invest with the States to update monitoring networks.
- Some likely funding preferences:
  - Improving data quality and currency
  - Technology to simplify data ingestion
  - Filling critical gaps in networks

## Core components of AWRIS



## Enabling Framework:



- Set of standards for contributing and harvesting water data
- Common model for formatting water data
- Central repository for storing water data
- Geospatial fabric to organise water data and facilitate data queries and analysis

## Public Web Access:



- Data dashboard – at-a-glance summary of the status of water resources
- Data explorer – a set of tools and web-services for accessing, querying and reporting water data
- Data download – a mechanism for users to extract and download subsets of water datasets

## Business System:



- Toolset for analysis and interpretation of water data
- Engine for the production of an annual national water account
- Engine for the production of an annual water resource assessment

## Implementation - Progress to Date.

- Recruitment & Training
- Stakeholder consultation
- National technical workshops
- Establishing an R&D alliance with CSIRO
- Developing systems
- Regulations to support s.126 of Water Act (2007)
- Hydrologic monitoring upgrade Programme

## Regulations under s.126.




- Consultation began in November 2007
- Process expected to be finalised in June 2008
- [www.bom.gov.au/water/regulations](http://www.bom.gov.au/water/regulations)



### 4 Schedules:

- A. Persons or classes of persons who must give water information
- B. Kinds of water information to be given
- C. Time within which information must be given
- D. Form of the water information

## External coordination and consultation.

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1. Australian Water Information Advisory Council
  2. Lead Water Agencies
  3. Jurisdictional Reference Group on Water Information
  4. Expert Panels

## Outcomes.

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- National water information standards established.
  - Improved currency and quality of water data.
  - Value-added water information products.
  - Reliable water availability forecasts.
  - Seamless national information coverage.
  - Enhanced public access to information.
  - An independent, authoritative voice.



<http://www>

***All leading to greater rigour, confidence and foresight in water resources management.***

## Key Bureau Water Division contacts.



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