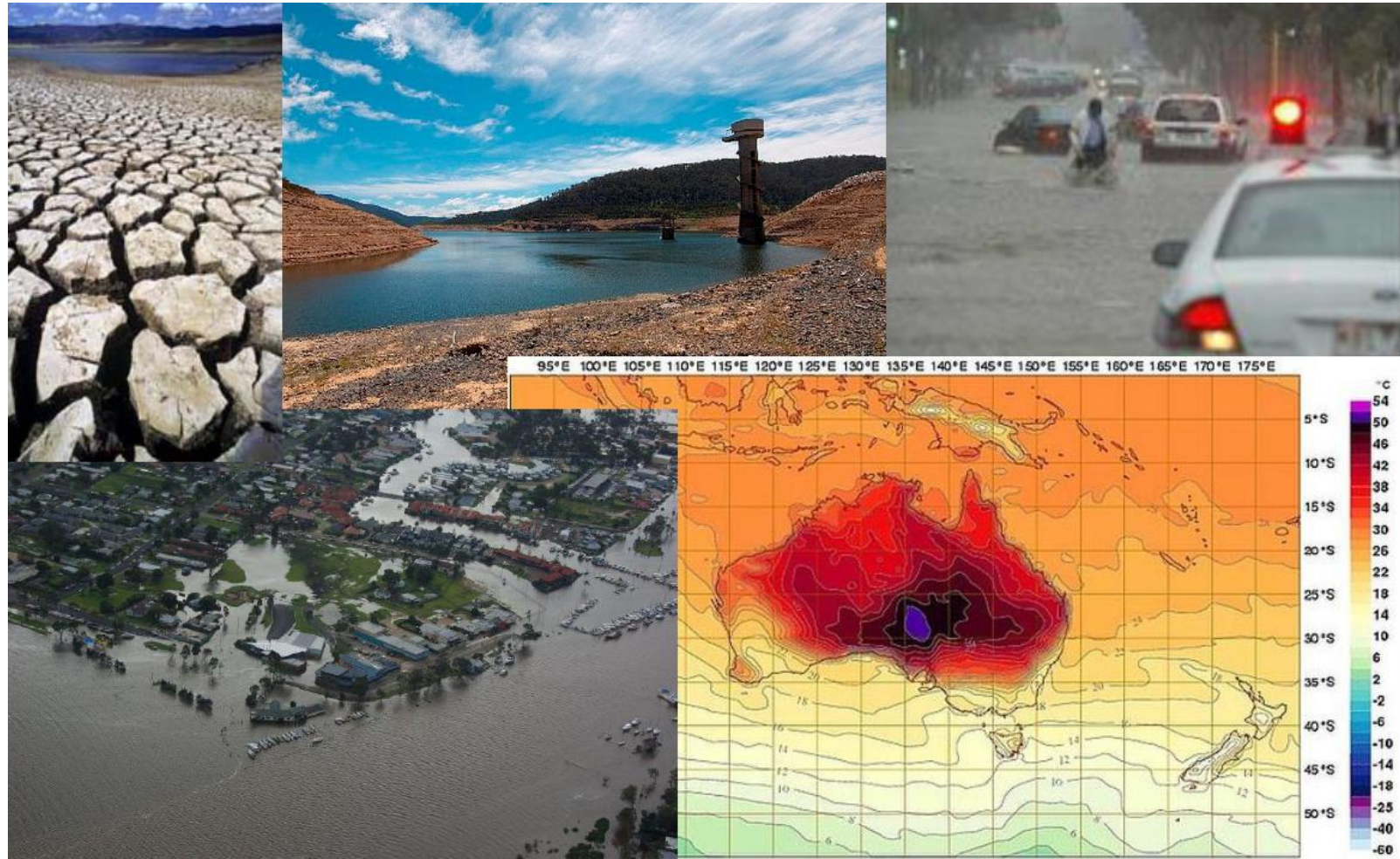


Australia: River Basin and Water Governance (reform)

Brian S. McIntosh, Associate Professor in Integrated Water Management, 4th November 2025

**“I love a sunburnt country
A land of sweeping plains
Of ragged mountain ranges
Of droughts and flooding
rains”**

My Country, Dorothea McKellar, 1904



The legal context for water governance

- Federation – meaning power is shared between National government and States
- Primary legal document is the Constitution which sets up who has authority over different matters
- Commonwealth Constitution 1901
 - Many disputes over water matters leading up to formation of Australia as a nation
 - Only 1 specific reference to water in the constitution:
 - **Section 100: “The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation”.**



Drivers – pre-1990

- Logic (from 1900 to latter part of 20th century):
 - Build infrastructure to provide supply (to cities and for irrigation)
 - Water resources are effectively unlimited
- Institutional context:
 - A few large, publicly owned bureaucratic institutions for supply, sewage, irrigation
 - Unreflective water pricing
- End result:
 - Large public debt and ongoing maintenance bill from infrastructure investment
 - Still uncertain levels of water security, service and drinking water quality
 - Increasing demand, scarce resource, clashing water rights and environmental damage



Objectives – water reform 1993-2013

The underlying objectives of the Australian national water reform agenda were to:

- *increase the productivity and efficiency of Australia's water use*
- *ensure the health of river and groundwater systems while servicing the needs of rural and urban communities.*

COAG's objectives in implementing the long-term agenda were to:

- *provide greater certainty for investment and the environment*
- *ensure that Australia's water management could deal with change responsively and fairly.*

The aim was to achieve:

- *a nationally-compatible, market, regulatory and planning based system for allocating and managing water resources for rural and urban use that optimised economic, social and environmental outcomes*
- *an efficient and sustainable water industry.*

The Australian Water Reform Journey

An overview of three decades of policy, management and institutional transformation

August 2016

OBJECTIVES

Increase productivity & efficiency of Australia's water use
Ensure the health of river and groundwater systems

IMPROVING ENVIRONMENTAL MANAGEMENT

Providing water for the environment

Increasing environmental share in over allocated systems

Integrating river basin management

TRANSFORMING WATER ALLOCATION

Establishing secure, tradable entitlements

Developing water trading & markets

Undertaking water planning

REFORMING WATER PRICING

Consumption-based pricing

Full cost recovery

Transparent cross-subsidies & their removal where possible

Varying implementation in urban & rural areas

MODERNISING INSTITUTIONAL ARRANGEMENTS

Separating water resource management, standard setting, service delivery & regulatory enforcement roles

Independent price regulation

Ensuring urban water authorities are sufficiently large & benchmarked to be financially viable & efficient

Devolution of irrigation water authorities to local bodies that are responsive to irrigators

IMPROVING WATER INFORMATION & KNOWLEDGE

Water metering

Water registers

Water accounting

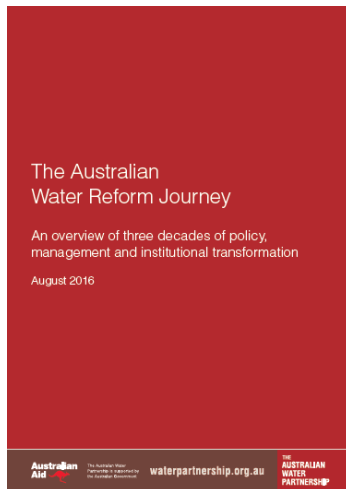
Monitoring ground- & surface water

Model development

Investment in water research

COMMUNITY & STAKEHOLDER INPUTS

Water reform in more detail



Water governance systems

“Water plans are developed under the [Water Act 2000](#) to sustainably manage and allocate water resources in Queensland.”

The Queensland State Government develops, monitors and periodically (typically even 10 years) water plans for each plan area to balance the needs of:

- Water users (e.g. towns, agriculture and other industries)
- The environment.

There may be unallocated water in a plan

There may be Indigenous reserves in a plan

More on framework [here](#), plan development [here](#) and plan implementation [here](#).



Water reform - QLD

Drivers of change	Design response
Increasing demand for limited resource	<ul style="list-style-type: none"> ➤ Define and enforce overall limits to total water resource in each river basin and major groundwater aquifer
Deficiencies in traditional management approach e.g.: <ul style="list-style-type: none"> • Incremental licensing/decisions • Over allocation in some catchments • More and more conflicts over water – legal actions • Major environmental incidents (e.g. blue-green algal blooms) 	<ul style="list-style-type: none"> ➤ Establish hierarchy of plans <ul style="list-style-type: none"> • Water plans (sub-legislation) define overall desired outcomes, objectives and strategies for each river basin or major groundwater aquifer • Operation Manuals and Water Management Protocols (administrative instruments) set out detailed rules for managing water resources and making water allocation and management decisions
Government drive to provide for: <ul style="list-style-type: none"> • the environmental flow requirements of rivers • greater clarity and water users' confidence in water property rights 	<ul style="list-style-type: none"> ➤ Define environmental flow objectives for each river/major aquifer ➤ Define water allocation security objectives for each group of water users (towns, industries, agriculture)
Drive for greater transparency and accountability by government and its agencies	<ul style="list-style-type: none"> ➤ Institutional separation of the rule-makers/enforcers from the operators <ul style="list-style-type: none"> • E.g. Department (DRDMW) separate from Sunwater or Seqwater

Challenges and reforms ahead

Two Productivity Commission (PC) enquiries (2017 and 2020) found good progress and recommended a renewed National Water Initiative (NWI) and Agreement (NWA) should focus on:

- Strengthening capacity to deal with climate change and extreme weather
- Increasing Indigenous Australians' involvement and influence in water resource management
- Improving the provision of urban water services
- Improving water monitoring, accounting and data
- Improving regulatory, governance and management arrangements
- Ensuring the use of best available information in decision making.

<https://www.dcceew.gov.au/water/policy/policy/nwi>



Thank you

A/Prof. Brian S McIntosh

m +61 0458 855 945 (also WhatsApp)

e b.mcintosh@griffith.edu.au

www.watercentre.org

