



Watery Sauces

28 years of measuring water on the driest inhabited continent...

“of drought and flooding rains...”

From My Country Dorothea Mackellar 1908

1. A personal perspective of Australian water resources over the last 28yrs and how they have driven market trends
2. The Australian Hydrographers Association (and why you need to be involved).



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

So, it started with a drought...

The Millenium Drought

- Spanned 1997–2009, affecting southern and eastern Australia
- Marked by prolonged rainfall deficiency and record-low inflows
- Coincided with warming temperatures, intensifying impacts

Impacts

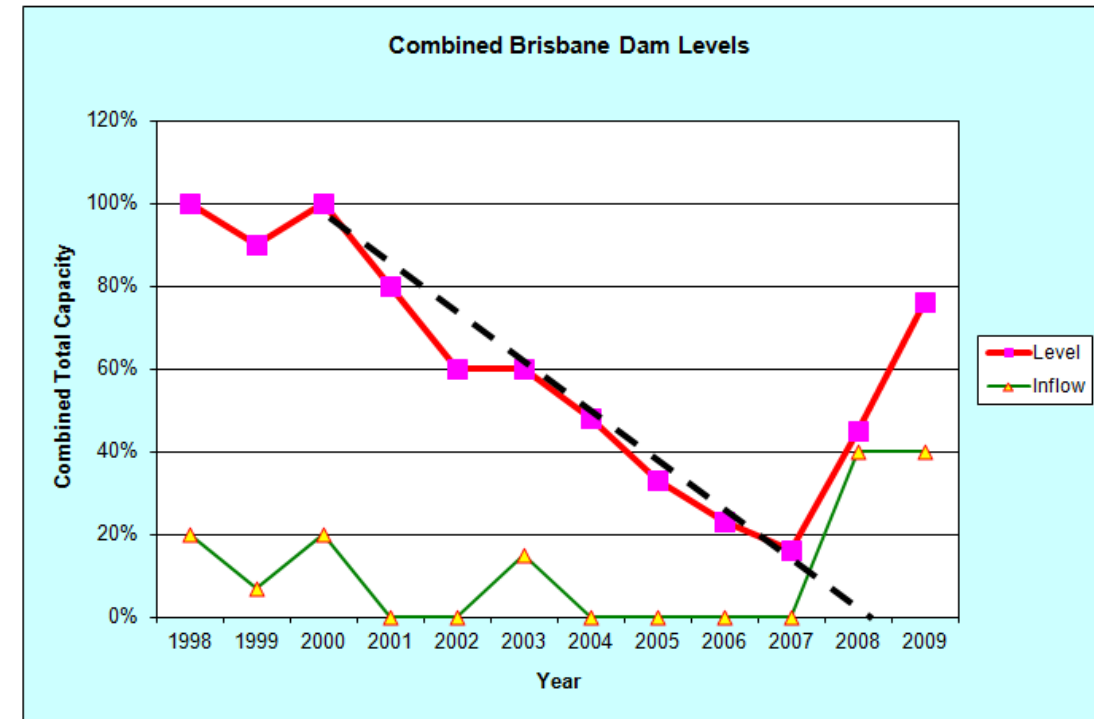
- Agriculture: Crop failures, stock losses, farm closures, major income decline
- Communities: Strict urban water restrictions, economic stress, rural depopulation
- Environment: Wetland collapse, fish kills, increased soil salinity, habitat loss



So, it started with a drought...

Water Management Response

- Rapid investment in desalination, recycling, and stormwater capture
- National Water Initiative (2004) → improved water markets & allocation reform
- Water Act (2007) → foundation for Murray–Darling Basin Plan
- Shift toward sustainable, climate-resilient water management



Source: <http://www.seqwater.com.au/public/dam-levels>

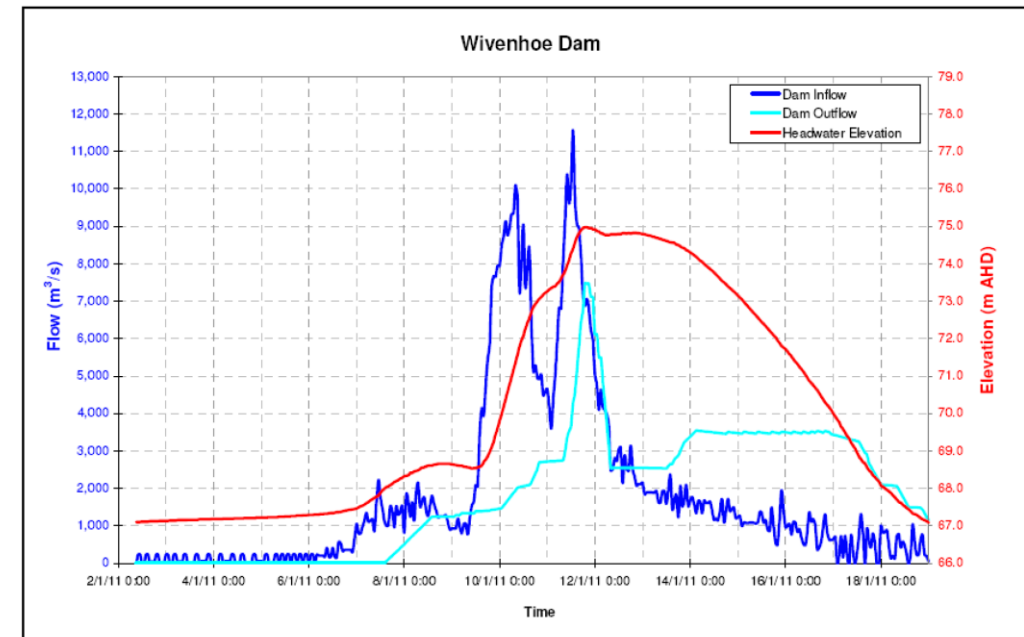
Then it rained...

Brisbane 2011 floods

- Occurred in January 2011, part of the wider Queensland floods (2010–2011).
- Driven by an exceptionally strong La Niña event, bringing record rainfall.
- Major rivers affected included the Brisbane River, Lockyer Creek, and Bremer River.

Extent & Impact

- Around 75% of Queensland declared a disaster zone.
- Brisbane River peaked at 4.46 m at the city gauge on 13 January 2011 — the worst since 1974.
- Over 20,000 homes and businesses inundated across Brisbane.
- 35+ fatalities statewide, including catastrophic flash flooding in Toowoomba and the Lockyer Valley.
- Infrastructure damage exceeded \$6 billion, with thousands displaced.



Then it rained...

Water Management Response

- Flood Commission of Inquiry reviewed dam operations and emergency decision-making.
- Revised Wivenhoe Dam protocols and expanded real-time monitoring and forecasting systems.
- Major investment in flood modelling, mapping, and urban planning reforms to reduce future risk.
- Established the Queensland Reconstruction Authority to drive recovery and long-term resilience.



And then there was the Four Corners Report - Pumped

(TV current affairs show)

Pumped

- Aired in 2017 (*"Pumped"* investigation by ABC 7.30 and *Four Corners*).
- Exposed illegal water extraction and tampering in the Barwon–Darling system.
- Highlighted regulatory weakness and lack of transparent enforcement.

Impacts

- Eroded public confidence in the Murray–Darling Basin Plan.
- Undermined environmental water recovery programs and taxpayer investments.
- Exposed systemic governance failures and potential corruption risks.



And then there was the Four Corners Report - Pumped (TV current affairs show)



Water Management Response

- NSW DDG Water Gavin Hanlon resigned following the *Pumped* revelations, prompting broad reform and integrity reviews.
- Launch of state and federal inquiries into compliance and metering integrity.
- Creation of the NSW Natural Resources Access Regulator (NRAR) for independent oversight.
- Introduction of mandatory telemetry, metering reforms, and increased penalties for theft.
- Renewed focus on transparency, accountability, and cross-jurisdictional coordination.



d again...



Key themes and opportunities

Drought...

- Periods of lean years, where operational budgets are cut and market success is found in exploring niche markets and opportune projects

Flood...

- Periods of heavy Government investment, usually after a natural disaster or just before an election

Opportunities...

- Water Quality – Nitrates, TSS and anything that will impact the GBRF or MDB Fish Kills
- Sensor connectivity and site uptime reliability
- IoT network scalability (Gold, Silver & Bronze monitoring)
- Non-contact flow & WQ measurement
- Increased regulation...

How to win?

Put the customer at the centre of everything you do. The last thing that they want to hear is that “you can’t” because of internal process! And they really don’t care about your corporate culture.

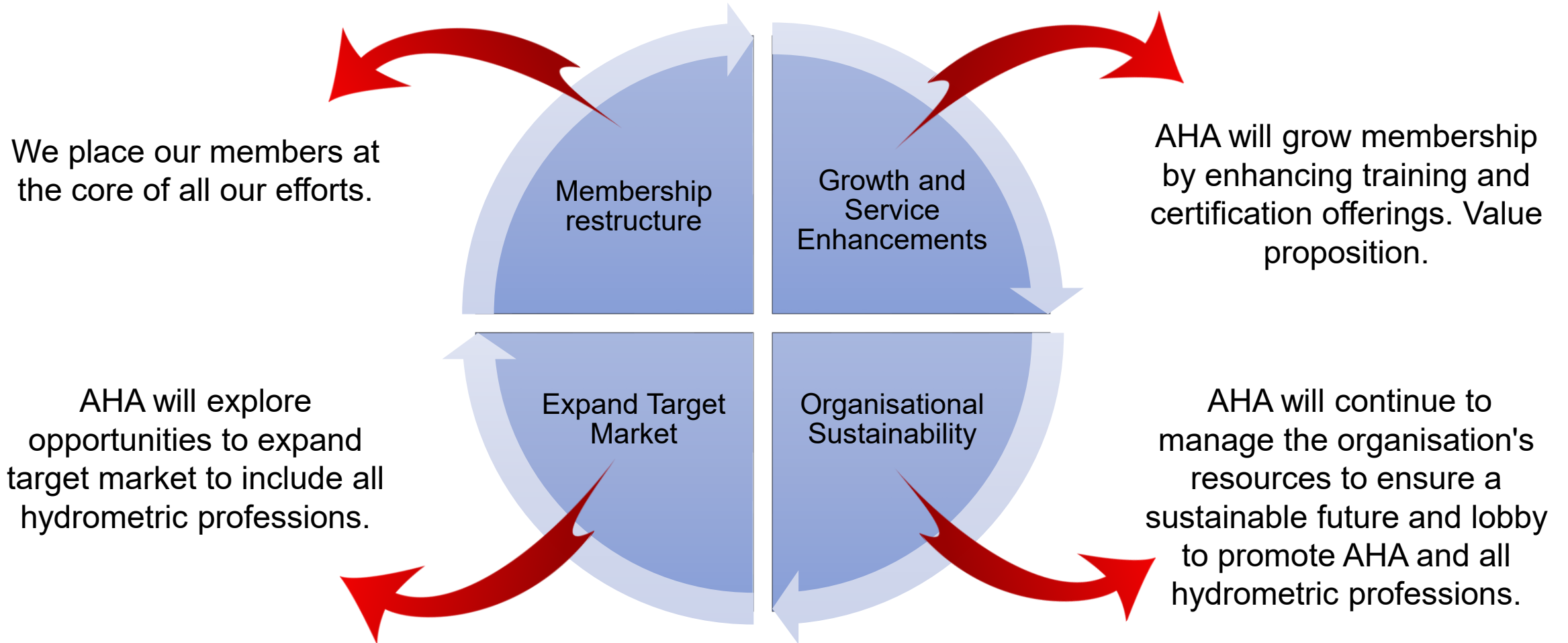
Who are the AHA?

The Australian Hydrographers Association are the peak non-for-profit body in Australia advocating for Australian Hydrographers and those that support us.

Key roles:

- 1) Delivery of the Water Resources Diploma
 - 2) Development and delivery of relevant continuing professional development courses
 - 3) Coordination and advocacy lobbying for the industry
 - 4) A gateway between industry and operator (conference, technical workshops, regatta, journal etc).
- 300+ members (swelling to 400+) in conference years
 - Financially stable and resourced to win
 - All States and Territories are represented

STRATEGIC PILLARS





AUSTRALIAN
HYDROGRAPHERS
ASSOCIATION

2025
CONFERENCE

EXPLORING WATER'S DEPTHS

Unveiling the evolution & future of surface
water, groundwater & water quality monitoring.

12-15 MAY | LAUNCESTON, TAS



2025 Conference Dinner

Sponsored by
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Who are the AHA?

Opportunities to get involved:

- 1) Sign up, become a member and support our industry www.aha.net.au/join
- 2) Get involved with the 2026 Technical Workshop and Regatta (Steams are; Surface Water, Water Quality, and Flood Monitoring/Warning).
- 3) Volunteer to help out with the 2027 AHA Conference Organising Sub-Committee (Perth, WA)



Thanks!

Contact info: president@aha.net.au Or secretariat@aha.net.au