

Retelling Australia's Water Story

Hello, Yuma.

Opening

First, let me thank the National Press Club for giving me the opportunity to speak and to respond to questions about my just-published book with Monash University Publishing, '[Retelling Australia's Water Story](#)' which is in the series 'In the National Interest'. I also thank my friends and colleagues who are too numerous for me to mention individually; those who have guided me over two decades of working on water in Australia.

This year, 2024, is also an auspicious time to talk about water as it's now 20 years since Australian governments agreed to the National Water Initiative, a set of principles about how we should manage our water in the national interest.

Acknowledgements to Country

Before getting into the main part of my Address, I would very much like to acknowledge that we are meeting on the Country of the Ngunnawal People. I pay my respects to their Elders, past and present including to Bradley Bell, and his son, who are here with us today. Australia's First Peoples have been, and always will be, the traditional custodians of our waters and land. As my Address will highlight, we have a lot to learn from them in genuine and respectful partnerships.

Howard's 2007 National Plan for Water Security

In a National Press Club Address on 25th January 2007, Prime Minister John Howard delivered a 'National Plan for Water Security'. That plan was a genuine response to water crises made worse by a decade-long Millennium Drought that ended in 2010.

At that time, John Howard told us that Australia's *"...current trajectory of water use and management in Australia is [was] not sustainable"*. Moreover, he called it: *"a great national problem."* His solution, in his own words, needed: *"...radical and permanent change."*

He announced a 10-point National Plan with 10 billion dollars to make it happen. It was to be delivered over 10 years. It was, as he said: *"our great opportunity to fix"* what was

broken and *“...to confront head on and in a comprehensive way, the over-allocation of water in the Murray-Darling Basin.”*

The National Plan for Water Security, among other things, included: \$5.8 billion in infrastructure upgrades to increase water-use efficiency, \$3 billion to buyback, from willing sellers, tradeable water rights, and \$225 million for accurate water meters to increase transparency of water extractions for irrigation.

Fast Forward to 2024

In 2021, almost a decade after the 2012 Murray-Darling Basin Plan was enacted and 14 years after his National Press Club Address, John Howard acknowledged that:

*“...management of the Murray-Darling had been compromised by very, very bad administration over the years by governments of both persuasions’.*² He was right.

John Howard had wanted the almost \$6 billion water infrastructure subsidies and grants in the National Plan for Water Security to: *“...save more than 3,000 billion litres of water”*. In fact, the additional water for the environment from these subsidies in the Basin have, nominally, only achieved one quarter of this goal. And because increases in water-use efficiency, typically, reduce the water that would have returned to aquifers and streams, the real increase in stream flows is likely to be no more than 10% of Howard’s water savings goal.

John Howard had wanted to spend \$3 billion on buybacks of tradeable water rights from willing sellers. Because of push backs by some irrigators and their lobbyists, the amount of water that could be recovered for the environment was capped by the Coalition government at 1,500 billion litres in 2015. This has meant that about 500 billion litres of water, a volume close to what is in Sydney Harbour, did not get delivered as increased stream flows in the Murray-Darling Basin.

John Howard had wanted \$225 million for irrigation water meters to stop water theft and allow greater management control of water in the Basin. In fact, a decade after Howard’s 2007 National Press Club Address, it took the ABC’s 4 Corners journalists to expose alleged water theft by a few irrigators in the north of the Murray-Darling Basin. This State of Affairs was aided and abetted by a ‘blind eye’ by some of those in charge.

And in 2017, a decade after John Howard announced his National Plan, an Independent Review Panel estimated that up to 75 per cent of surface water diversions in the northern Murray-Darling Basin were still unmetered.

The good news is, following the public outrage about what ABC's Four Corners exposed, New South Wales created a regulator that is a real 'cop on the beat'. This state regulator uses satellites and remote sensing to identify, charge, and to ultimately prosecute irrigators, and others, who are stealing water at our expense.

John Howard had wanted to stop: "...*the chronic over-allocation of water in the Basin*" and impose an: "...*effective Basin-wide cap on water extraction*". In this he had been informed on what was needed by scientists, including the late Peter Cullen and also my good friend and colleague John Williams who has joined us here today at the National Press Club.

In fact, five years after John Howard left political office, Australia got a 2012 Basin Plan. But this Basin Plan has delivered hundreds of billions of litres less water for streams and rivers than what was originally proposed in 2010 as the absolute minimum for environmental water requirements (that is, a reduction in surface water diversions of 3,856 billion litres per year was recommended to deliver on the *Water Act 2007* but the 2012 Basin Plan only enacted a reduction of 2,750 billion litres in water extractions and has resulted in only a reduction of just 2,100 billion litres).

And to add insult to injury, in 2018, the Federal Coalition and Labor together agreed to *increase* the planned water diversions in the northern Murray-Darling Basin by 70 billion litres, despite the best scientific evidence to the contrary. Within months, the experts were proven correct; in 2018-19 some 2 million fish suffocated from a lack of oxygen in the water along the Baaka (lower Darling River) at Menindee, New South Wales. And again, in early 2023, and this time not even during a drought, 40 million fish were killed at or near Menindee.

An Academy of Science investigation into the 2018-19 mass fish kill concluded³: "*there is not enough water in the Darling system to avoid catastrophic decline of condition through dry periods.*"

An investigation into the 2023 mass fish deaths by the New South Wales Office of the Chief Scientist and Engineer observed⁴: *“Mass fish deaths are symptomatic of degradation of the broader river ecosystem over many years ... Explicit environmental protections in existing water management legislation are neither enforced nor reflected in current policy and operations.”*

And I highlight that this independent report was published in August 2023.

The Hydro-Illogical Cycle

So how can we reconcile ourselves to what was promised by John Howard in 2007 and what we have ended up with in 2024? How can it be that we had a Prime Minister who wanted and enacted water reform, accompanied by billions of dollars, that we have failed to deliver the: *“radical and permanent change”* that Australia so desperately needs for its waters?

First, we have failed by not honouring discussions that ultimately led to the 2004 National Water Initiative. That is, state water licences, after being separated from land and converted to water entitlements, were to be purchased back from willing sellers in sufficient volumes to stop, once and for all, overextractions of our waterways. This understanding formed part of the 2004 National Water Initiative’s Principle 5, agreed to by Australian governments⁵. Namely: *“to ensure the health of river and groundwater systems by establishing clear pathways to return all systems to environmentally sustainable levels of extraction”*. This has still not been realised two decades later despite the expenditure of many billions of taxpayer dollars.

The difference between principle and performance or what gets promised and what gets delivered, is explained by the Hydro-Illogical Cycle. That is, water is allocated and managed as ‘business as usual’ such that too much gets extracted and not enough is left to ensure sustainable waterways until there is an extended drought, or some other water emergency. Only when there is a full-blown water crisis apparent to all, including in our big cities, do Australian governments act differently and intervene to mitigate ‘too much, too little or too dirty’ water.

But when the rains return, the flood waters have receded, or the Royal Commission has reported back, decision-makers move on to what they think are more pressing political concerns. This is when those few who have the most to lose from public-interest water reform, ‘push back’ to impede and even halt agreed-to changes for the public good.

Successful pushing back has meant that most of the costs of water extractions are imposed on those who do not extract, or who extract very little, water while many of the benefits accrue to the few who extract most of Australia’s freshwater. The losers in this game of ‘water monopoly’ are downstream communities and important business sectors, such as tourism. And the rivers and wetlands that sustain us all.

The Hydrocracy

The push back to public interest water reform is led by the ‘Hydrocracy’. It is akin to the wealthy squattocracy of nineteenth-century New South Wales who acquired the right to use, at virtually no cost, vast areas of Crown land by virtue of being the first European settlers to do so.

The 21st-century Hydrocracy includes some of those who were the largest beneficiaries of free state water licences. These free water licences were allocated decades ago and included, in New South Wales, up to three million litres per hectare allocated for free to irrigators who owned land near streams and rivers suitable for and developed for irrigation. The ‘freebies’ included little or no charge for the capital costs for the dams that allow for more reliable stream flows, and billions of dollars in subsidies since 2007, paid for by you, the Australian taxpayer, to irrigators to increase water-use efficiency but which have generated very few public benefits.

And it’s worse than you think. Water-use efficiency subsidies have failed to deliver the desired and planned for increase in stream flows. If, instead, open tenders had been used to acquire water rights from willing sellers, Australia would already have achieved the stream flow targets in the Basin Plan. And this could have been accomplished at a saving of billions of dollars.

And to cap it off, the Hydrocracy has been very successful at ensuring water allocation plans that determine who get the water, and under what circumstances, favours

irrigator interests rather than the public interest. For example, a 2020 investigation into alleged inappropriate influences, undertaken by the NSW Independent Commission Against Corruption (ICAC)⁶, found that water access rules had allowed for:

“opportunistic extraction by a small number of large irrigators of unprecedented volumes of water at low flows, which are the flows that are critical to riverine ecosystem health”

ICAC further found that a senior NSW public servant who had provided confidential information to an irrigator reference group did not act in the public interest and his conduct was improper. As a result of its investigations, ICAC exhorted, in relation to how water is regulated in New South Wales, that⁷: *“Public officials cannot be permitted to get too close to one sector in their portfolio and ignore the other stakeholders.”*

Haves and Have-Nots

If someone gets away with water theft, or if water allocation plans allow up to 80% or more of the stream flow in dry periods, there are real winners and losers. If, annually, one thousand two hundred billion litres of water are extracted to grow cotton in the Murray-Darling Basin there are consequences for downstream users in terms of both water volumes and water quality.

Just one of many of these downstream consequences of overextractions occurred in the town of Wilcannia on Baaka (lower Darling River) that ran out of town-supplied drinking water in 2018–19 during the last drought. This occurred months before it otherwise would have because of large upstream irrigation water extractions.

The point is that we are not getting the balance right and urgent water reform is getting stymied by those who have received large freebies, some of whom are coming back for even more free water. In the past decade, the Northern Territory (NT) Government has given away free groundwater licences to pastoral lease holders to pump water, including from native title land. Some of these groundwater licences given away free to individual enterprises are worth tens of millions of dollars. And one agri-business, with a pastoral lease in one of Australia’s driest places (not including our deserts), was recently given the right to eventually extract, at no charge and with no compensation to the native title owners, up to 40 billion litres of ground water per year for thirty years.

Also in the NT is the Georgina Wiso area. This is where the NT government approved a water allocation plan at the end of 2023 that has increased by 14 times the amount of groundwater that can be extracted; from 15 billion litres per year to 210 billion litres per year with much of this water allocated for irrigation.

And just north of the Georgina Wiso water allocation area is Mataranka, about 400 kilometres south of Darwin. This is where a draft water allocation plan is under consideration that doubles the existing permitted groundwater extractions. If the Draft Mataranka Water Allocation Plan is implemented, it will jeopardise the existence of sacred sites and internationally renowned freshwater springs—Mataranka Springs and Bitter Springs—and reduce streamflow along the Roper River which depends on groundwater for its base flows. Crucially, this Draft Plan is opposed by the Traditional Owners from where much of the groundwater will be extracted.

Unfortunately, this is not just a made in New South Wales or Northern Territory story of water injustice. The 2024 Productivity Commission Inquiry into National Water Reform highlighted how the Western Australian Government, after eighteen years of consultations and drafts, withdrew in December 2023, without any notice, an entire package of much-needed and promised water reform legislation. The consequence is that Western Australia remains, in part, governed by water planning laws drafted when First Peoples were not recognised as citizens.

Same as it Ever Was

From the very beginning of colonisation in 1788, when the land and water of the Gadigal People, in what today is known as Sydney, was stolen from them without treaty, dispossession has continued. It has taken place under the unprincipled and patently false premise that the land and the water on which First Peoples had lived for millennia belonged to no one.

The ‘Great Dispossession’ was manifest in Australia’s own ‘water wars’, beginning first in New South Wales in the early nineteenth century. It was motivated by the desire of a few to acquire highly valuable squatting rights by stealing the land—and the water on it—from its rightful custodians, First Peoples. These water wars led to the destruction of First Peoples’ food sources by livestock; the removal of First Peoples’ fish traps; and the

deliberate poisoning of the food and waterholes to ‘move on’ First Peoples. Appallingly, it also included murder with many of the 421 recorded massacres of First Peoples that took place between 1780 and 1930 occurring at waterholes or on riverbanks.

Truths and Post—Truths

Yet, somehow, the storyline is that we, as Australians, are ‘gold medallists’ in how we manage our water. In 2018, the CEO of the Murray-Darling Basin Authority, self-described as ‘an independent statutory agency that works with Basin states, industries and communities to manage the Murray–Darling Basin’s water resources in the national interest’, claimed⁸: *“Other countries look to our nation as having some of the best and most successful water management policies in the world.”* In Paris, in July 2024, Australians really were gold medallists in the Olympic pool. But we are very far from that in how we manage our freshwater.

The spruikers of the ‘world’s best practice’ water story highlight that water markets in the Murray–Darling Basin are world-leading in terms of value and the amount of water traded. This is true, but it’s also true that these water markets are unjust because virtually no water rights were allocated to First Peoples. Further, those who were first given state water licences that were later converted to tradable water rights didn’t even pay for their initial free allocations that are now worth, in total, tens of billions of dollars.

The spruikers highlight that almost all ‘big city’ Australians enjoy good quality water 24/7 out of their taps. This is true, but it’s also true that hundreds of thousands of Australians living in rural and remote locations have tap water that fails to meet the Australian Drinking Water Guidelines.

Water quality problems vary by rural and remote community but include microbiological pollution, such as *E. coli*, and contaminants that cause ill-health which cannot be removed by boiling, such as nitrates. For a few dozen or so communities, people have tap water with elevated levels of the ‘forever chemicals’ such as PFAS. And, shockingly, for a supposed ‘gold medallist’ in water management and in one of the world’s wealthiest countries, Australia still lacks a national drinking water quality database for communities less than 10,000 in size.

Caring for Country

Lest we forget, First Peoples flourished for tens of thousands of years because of their connections with, obligations to, and care for Country, including Living Waters. This is what Australians should be justifiably proud of; namely, how First Peoples sustainably managed freshwater for millennia. It is First Peoples, and other Australians, struggling for a 'fair go' in how we manage our waters, who deserve a gold medal, not those who claim Australia has the world's best water practices.

On the Australian 'water podium', I would name as gold medallists the Martuwarra Council, its Elders and its Chair—Professor Anne Poelina, for how they care for Martuwarra (Fitzroy River) in the Kimberley, Western Australia. And at our Water Olympics I would celebrate, among others, the Gunditjmara People in Victoria who practised sustainable aquaculture for thousands of years at a place that was recently recognised as a UNESCO World Heritage site.

Great Degradation

Too much influence by the Hydrocracy and not enough from First Peoples and public-interested scientists has got in the way of sensible water reform in the public interest. The result is that many of Australia's waterways are suffering 'Big Time'.

Over the years, the regulation of rivers through the construction of weirs and dams has partially or completely disconnected groundwater and surface interactions. Barriers across rivers have prevented or restricted overland flows to floodplains and wetlands, and damaged and/or destroyed fish, bird and invertebrate habitats.

Successive Australian 'State of the Environment' reports have consistently identified ongoing risks to wetlands from overextraction of water, exotic aquatic weeds and pests (such as the common carp), and water pollution.

In south-eastern Australia, the average surface area of wetlands over the period 2016 to 2020 was only about one-third compared to what it was during the period 1983 to 1987. Environmental degradation has occurred even in internationally recognised wetlands such as the Coorong, Lower Lakes and Murray Mouth.

The primary cause is a big decline in stream flows and when they occur. According to a recent evaluation of twenty-three riparian sites and seventy-two environmental water requirements across the Murray-Darling Basin, a lack of water connectivity has meant that about half the sites achieved none of their environmental watering requirements. And over all sites, only about one third of the environment requirements were achieved.

Modelling shows that while the 2012 Basin Plan increases the likelihood of sites of meeting environmental water requirements, from 34 per cent to 46 per cent, it's no gold medal performance. And a failing grade is not what was promised to us in the 2004 National Water Initiative or the 2012 Basin Plan.

Climate Change

We have been making incremental water reforms where transformational reform is required while going backwards in some places. But the world is not standing still.

Australia, like every other country in the world, is experiencing climate change. We are more vulnerable than many because of our susceptibility to global weather oscillations, such as the El Niño–Southern Oscillation that contributes to large inter-annual rainfall variability.

Climate change in Australia will be experienced mostly through changes to the water cycle, whether it be too much (floods), too little (droughts), or too dirty (such as sea-level rise) water. These effects will be large. They will also rapidly increase as the world gets closer to 2°C warming—a likely outcome by 2050.

In some locations, such as south-western Australia, there has already been a decline in average annual rainfall of about 20 per cent since 1970. In other locations, especially in the far north of Australia which already has high rainfall, average rainfall in the wet season is projected to increase with climate change, posing another set of challenges. A higher average surface temperature, a greater maximum surface temperature, increased annual rainfall variability, and a change in when the rainfall happens during the year, will all adversely affect agriculture, and our streams, rivers and groundwater.

To respond to climate change, we need to do much better water planning. And we need to shift away from treating streamflow in rivers as a second-order priority. An essential

adaptation response must be to ensure up-to-date measurements of streamflow and to distinguish the impacts of climate change from increased water extractions, such as from ‘floodplain harvesting’.

And yes, climate change is reducing stream flows in many places but by far the biggest impact remains over-extractions of water for irrigation. In a recent study, it was found that at least 60% of the reduction in streamflow along Baaka (lower Darling River), measured at Wilcannia, over the past forty years is attributable to increased water extractions from irrigation, not climate change.

Notwithstanding the large, and in some cases, unavoidable costs of climate change, there is much that can be done to reduce damages and losses. This includes supporting socio-economic and biophysical systems to ‘bounce back’ following adverse shocks. But this must be done in ways that avoid ‘locking in’ practices that get in the way of a sustainable future.

Towards Water Justice

Retelling Australia’s water story is much more than a list of what is wrong. It is a wake-up call to fix what is broken, now and not later, and to listen to those seldom heard.

It’s about taking a journey towards a just and sustainable water future for all. It’s about moving from a ‘*deficit*’ view of water planning that includes:

- (1) Dispossession of First Peoples water,
- (2) Degradation of land and water because of excessive water extractions, and
- (3) The false belief that we can ‘drought proof’ all of Australia

Instead, we need to shift our vision to one of ‘*abundance*’ which is about:

- (1) Learning to Care for Country in partnership with our First Peoples,
- (2) Democratising water decision-making so that all voices are listened to,
- (3) Holding decision-makers accountable for what they do and don’t do,
- (4) Ensuring water users pay for the full costs that they impose on others and the environment,
- (4) Adapting to climate change and learning from what works and what doesn’t, and
- (5) Delivering good drinking water for all Australians, not just those in our cities.

To make this journey a success, we need to share our collective visions of what we want, as Australians, for our water and for our country. This requires Dialogue, and corresponding actions and reflections, that includes all voices. And by dialogue, I do not mean a ‘conversation’ or a ‘consultation’. Dialogue is about an ongoing process of listening and then delivering agreed-to actions that support a collective vision, from all points of views, while evaluating the trade-offs to get there.

This is not a pipe dream. In 2010, the New South Wales National Resource Commission observed we had⁹: “... *institutional arrangements ...to truly implement an integrated approach to catchment management, where all components of the landscape are managed together in partnership with the community.*”

Dialogue demands a common understanding to our common problems such as over-extraction of water in a catchment. By contrast to business as usual, Dialogue means that water reform doesn’t just belong to one person or a particular group. Dialogue is the antithesis of top-down decision-making and ‘set and forget’.

Our water story is driven by a few ‘Haves’—the Hydrocracy—who have had an overwhelming influence over decision-makers. Their actions have undermined trust that we can deliver successful and transformational water reform. And the Have-Nots only get listened to when there is a water crisis of great magnitude that it requires a political response. For example, during the Millennium Drought when most Australians, including in the cities, suffered from water restrictions.

It’s high time to deliver the change that Australia must have: to build on what’s good in the Federal 2023 ‘Restoring our Rivers’ Bill, such as allowing once again the purchase of water rights from willing sellers so as to increase stream flows; a renewed National Water Initiative; regular and independent river and water audits; the restitution of sufficient water rights to First Peoples; good drinking water for all, and much, much more.

Retelling Australia’s Water Story tells us we cannot simply leave it to state water agencies to fix what’s wrong. We cannot assume that governments will implement the reforms that were promised or even legislated. Instead, in an active democracy, we

need to work together to make sure what's good for our country, what's good for our waters, and what's good for our future, actually gets delivered.

It's time for all of us to be listened to, not just the privileged few. It's time for a real change in how Australia manages and cares for its waters. I, YOU, all of us, need to be part of the solution to bring about the transformational water reforms that Australia urgently needs.

End Notes (sources and hyperlinks for direct quotes)

1. J. Howard, 25 January 2007. [A national plan for water security: transcript of address to the National Press Club, Great Hall, Parliament House](#).
2. J. Howard, quoted in *The Australian*, 21 February 2021. '[River system an enduring challenge of the federation John Howard's Murray-Darling reform bid holds lessons for today](#).'
3. Academy of Science. [Investigation of the Causes of Mass Fish Kills in the Menindee Region NSW over the Summer of 2018–2019](#), 2019, p. 2.
4. New South Wales Chief Scientist and Engineer, 2023. '[Executive Summary: Independent Review into the Mass Fish Deaths in the Darling-Baaka River at Menindee Findings and Recommendations](#)', 31 August 2023. P. 3.
5. [National Water Initiative](#), 2004.
6. Independent Commission Against Corruption, 2020, Investigation into Complaints of Corruption in the Management of Water in NSW and Systemic Non-Compliance with the Water Management Act 2000, ICAC, Sydney, 2020, p. 9.
7. Independent Commission Against Corruption, 2020, Investigation into Complaints of Corruption in the Management of Water in NSW and Systemic Non-Compliance with the Water Management Act 2000, ICAC, Sydney, 2020, p. 123.
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9. Natural Resource Commission of New South Wales 2010. 2010 Progress Report. Cited in J. Williams 'Is Integrated Catchments Management Now a Possibility in New South Wales? (available on request).