The myths of the Murray

[Alan Moran](https://www.spectator.com.au/author/alanmoran/)

Over the past century, the Murray Darling river’s naturally highly irregular flows have been transformed to convert it into the tranquil, ever-flowing waterway that has allowed the Basin it serves to become the source of 41 per cent of the nation’s agricultural output.

Green activists have, however, demonised irrigated farming by promoting myths about the river being under environmental stress. Such claims have been further amplified by fictitious and disproven claims that the precipitation into the catchment area will be much reduced due to supposed global warming.

As a result, one quarter of the water previously used for agricultural activities dependent on irrigation has been reallocated to environmental targets, including transforming the mouth of the Murray from its natural salt-infused state into freshwater lakes. Mismanagement of these environmental flows was critical in causing an unprecedented fish kill in 2019.

The cost of the Basin Plan in derating the region’s agricultural potential has been tragic, for the region. In aggregate terms this is likely to be in excess of $3 billion per annum at a time when agricultural export opportunities are promising. The measures adopted in the Basin plan were reactions to ill-founded and refuted concerns about human damage to the environment. The Commonwealth should cease incurring costs in preventing water use for irrigation and should re-sell the water it has banked to those willing to pay for it.

**The Murray Darling Basin’s Development**

In the period 1922-1939 the Murray saw the Hume Dam and other facilities transform it into a river no longer swelling and drying in response to annual precipitation. Having been developed over the twentieth century into a tranquil working river, largely responsible for allowing its basin to become home for 41 per cent of the nation’s agricultural output, the waters of the Murray Darling are now being re-allocated to non-productive uses.

In 1995, around 11,000 of the system’s 32,000 gigalitres were allocated to farmers (about 2,500 gigalitres is for drinking water) when state governments agreed to issue no more irrigation licences.

Green activists then orchestrated hysterical claims focussing on the state of the river. “Our continent is falling apart”, said the catastropharian Tim Flannery-led “Wentworth Group of concerned scientists”. Other claims included, “salt is destroying the rivers and land like a cancer”, and that animals and plants were facing extinction.

None of this was true – land salinity, for example, affects only 0.4 per cent of Australia, almost all of it due to natural salt outcrops. And, a century of Murray-Darling dam building and the accompanying management had replaced the irregular, salt infused waterway that the explorer like Charles Sturt found in the eighties, with today’s continuously flowing river.

In addition to being driven by green fictions, the Murray-Darling water policy also seeks to ensure freshwater in the lakes at the Murray mouth. Paradoxically, that water allocation actually modifies nature by feeding lakes that would be naturally brackish water.

Green activists and their supporters in academia and the bureaucracies have continuously raised the ante on the amount of water sought to be taken from farmers to remedy concocted environmental ills. In 2002 they sought 1,500 gigalitres of irrigators’ water (14 per cent of the total) and the Howard Government settled for 450 gigalitres.

But the new radicalism of anti-modern farming was fermenting a more potent brew. In this it was assisted by the millennial drought – wrongly forecast as a turning point for water availability due to presumed links between precipitation and massively reinforced passions about calamitous climate change.

The post 1980 notion of anthropogenic induced climate change and its adverse consequences to mankind was embraced by politicised scientists from the outset. Their work has continued to provide fuel for regulatory action. Thus, in January 2008 the nine authors of an influential [CSIRO report](https://www.researchgate.net/publication/237591567_An_Assessment_of_the_Impact_of_Climate_Change_on_the_Nature_and_Frequency_of_Exceptional_Climatic_Events), *An Assessment of the Impact of Climate Change on the Nature and Frequency of Exceptional Climatic Events*, fallaciously declared:

*Over the past 40 years (1968-2007), exceptionally hot years are typically occurring over 10-12% of the area in each region, i.e. about twice the expected long-term average of 5%. By 2010-2040, the mean area is likely to increase to 60-80%, with a low scenario of 40-60% and a high scenario of 80-95%. On average, exceptionally high temperatures are likely to occur every one to two years.*

Even prior to then, in 2005 alarmist [Tim Flannery](https://www.smh.com.au/national/running-out-of-water-and-time-20050425-gdl6xe.html), boosting the case for the Sydney Desalinisation plant, had said:

*If the computer models are right then drought conditions will become permanent in eastern Australia.*

And in [April 2007](https://www.smh.com.au/national/global-warming-to-fuel-global-drought-20070420-gdpyix.html) as Australian of the Year, he said:

*What we now know is happening around the world is that rainfall may be declining in some areas – in the order of 10 to 15 to 20 per cent over a 50 year period. We’ve seen that in south-east Australia.*

[Ross Garnaut](http://www.garnautreview.org.au/chp15.htm), another of the climate alarmists to whom the government turned, opined in his review issued 30 September 2008 (Chapter 15.3):

*Declining runoff in southern Australia is a significant threat to the continuation of irrigated agriculture in the Murray-Darling Basin. … Existing strategies for managing water supplies were developed in the second half of the 20th century, during a period of higher rainfall, and are not suited to a progressively drying climate.*

Rather [less soberly, Professor Garnaut](https://www.smh.com.au/national/drought-relief-bill-to-soar-say-scientists-20080707-32ru.html), described as the government’s top climate change adviser, warned that if climate change was not tackled it would destroy the Great Barrier Reef, end agriculture in the Murray-Darling Basin and wipe out the country’s snowfields.

The passage of time has demonstrated all these jeremiads to be utterly incorrect.

**Regulatory measures and agriculture in the Basin**

The litany of alarmist statements were meat and drink to the mixture of underperformers who typically hold the agriculture portfolios and even more so for those on the cataclysmic bandwagon like Malcolm Turnbull and Tony Burke. They provided a catalyst for regulatory intrusion and Shadow Water Minister Tony Burke says the cap which prevents Government from buying more water from the nation’s food producers would be removed under a Labor Government.

The AEF has been highly critical of the measures taken with regard to the Basin. In our December 2015 submission to Senate Select Committee on the plan we said

*The Australian Environment Foundation (AEF) supports the submission to the Committee by Dr. Jennifer Marohasy, who was a founding director of AEF. Accompanying, and forming part of, this submission is a report prepared for AEF by Dr. Marohasy in 2012 Plugging the Murray River’s Mouth: The Interrupted Evolution of a Barrier Estuary, which demonstrates that The Australian Government’s $10 billion plan to “save” the Murray-Darling by reconfiguring upstream irrigation so that more water is sent to the Lower Lakes, Murray’s mouth and Coorong, is based on a false premise; a misunderstanding of the fundamental nature of the Murray River’s estuary and the coastal processes that continue to shape it.*

*This reconfiguration amounts to a substantial reduction of water available to farmers and communities upstream and important upstream wetlands and other natural upstream environments through the Murray/Darling basin in effect to preserve an artificial fresh water environment in the Lower Lakes created by the barrages or dykes constructed during the 1930s, which dammed the Murray River’s estuary stopping the sea tides and making Lake Alexandrina wholly dependent on Murray River flows.*

The AEF went on to point out that it is essential to get right the balance between conservation and productive use of water through the Murray/Darling basin. To do that we argued first, for an examination of the costs of withholding from productive use of some 3000 gigalitres of water – over one quarter of that previously used for irrigation – mostly to maintain an artificial fresh water environment in the Lower Lakes; and secondly, to ensure that these costs are outweighed by the conservation benefits. Instead, the Basin Plan gives an absolute priority to the meeting of environmental flows with no cost/benefit estimates.

The Plan’s goal is one that oxymoronically “droughtproofs the environment”. The dams and other interceptions have converted a natural environment of drought and flood into a stable system that moderates these extremes, with benefits to irrigators and other users of the river.   At huge public expense in pursuit of goals that ostensibly seek to bring about a return to an idealised mythical natural environment, the regulatory management now being put in place is undoing this.

A review of the Basin Plan by a [SA Royal Commission](https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371) headed by Bret Walker supported this pre-eminence of environmental goals. Mr Walker was critical of the Basin Authority for taking some economic and social factors into account in determining the volume of water for irrigation as well as the seemingly sacrosanct environmental needs that are alone permitted to be considered under the Water Act. In this respect the Commissioner resembled a Flannery clone basing his criticism on the authority’s failure to consider “catastrophic” climate change, and to act on the best available scientific knowledge when determining how much water should be recovered for the environment across the basin,

Mismanagement of the system is a key feature. Well over 200 gigalitres of water has flooded the Barmah-Millewa forest since Spring 2018, which has been attributed to operational losses. This has meant farmers have stayed on zero allocation. If the 200 gigalitres were used to produce rice, that would mean 200 000 tonnes and $100 million of real income being produced.

Similarly, there was a massive, probably unprecedented fish kill in 2019 due to the draining of the Menindee Lakes in 2016 and 2017 to save on evaporation; that excessive release meant the low inflows in 2018 could not be supplemented, bringing about a later diminution of the water’s oxygen levels in the Darling. It is a bitter irony that the management of flows under the Basin Plan targeted at environmental improvements have had the opposite effect.

Mismanagement aside, it remains the AEF view that a careful specification of the environmental goals of any expenditures should be made and set against the costs involved. This view has been reinforced by our examination of the findings of the [Productivity Commission](https://www.pc.gov.au/inquiries/completed/basin-plan/report/basin-plan-overview.pdf) (PC), in its recent review of the Basin Plan. The PC summarised the program as:

*The Australian Government earmarked $13 billion to implement the Plan, including:*

* *$3.1 billion to purchase water entitlements for the environment. $2.7 billion of this has been spent to recover 1227 gigalitres (GL).*
* *$4.8 billion for investment in modernised water infrastructure, with $3.9 billion spent. Of this, $2.8 billion has been invested in projects that delivered 677 GL of water savings to the environment.*
* *$1.3 billion for supply measures, of which $34 million has been spent on developing projects.*
* *$1.8 billion to recover an additional 450 GL to pursue enhanced environmental outcomes, of which $14 million has been spent.*
* *$2.0 billion for other programs and activities, with $1.9 billion spent. Almost $8.5 billion has been spent, and $4.5 billion is still to be spent by 2024.*

The PC concluded:

*Significant progress has been made. About 20 percent of the water that was available for consumptive users a decade ago is now dedicated to the environment.*

*About $6.7 billion has been spent to recover about 2000 gigalitres (GL). Water recovery is within five per cent of the July 2019 target.*

*The arrangements for managing environmental water are working well, with evidence of improved ecological outcomes at the local and system scale.*

As a result of the reduced supply the price of “permanent” water allocations has risen fivefold. These prices become costs that are factored into the overall cost of produce.

The PC was critical about the machinery of the Plan’s management, lack of political oversight and absence of transparency. Yet, aside from identifying the fact that the compensation farmers got for selling water was usually adequate for them, the PC report offers little evidence of the plan bringing improvements on the system’s environment, still less does it evaluate any such improvements against the $6.7 billion already spent. Nor does the PC review offer means of measuring the impacts and outcomes that are associated with the Plan.

These omissions are most unfortunate given the profound uncertainties that exist in our scientific knowledge of the complex ecology and hydrology of the Basin, not to mention the economic and social consequences associated with changing water use there. In the debate over the Plan these uncertainties have received little or no acknowledgement, let alone attention, even from scientists and other specialists in these matters.

This is remarkable. Public funds have been used to buy and quarantine from commercial use over 10 per cent of the irrigation water in the nation’s most productive agricultural region. Yet, we have no metrics that define the outcome desired and no measurements that allow such an outcome to be tracked. This should not come as a surprise since many within the environmental pressure groups have radical goals that involve the displacement of irrigated agriculture and the human communities that depend upon it. Any restraints on the use of non-environmental water are merely stages towards that goal.

**The way forward**

Reform must follow the suggestions of Australian Environment Foundation in its December 2015 submission to the select committee on the Murray-Darling Basin Plan, which noted:

* A key rationalisation for the diversion of water in the Murray-Darling Basin from irrigation to environmental uses was the notion that the activity was leading to salinity with costs to both commercial agriculture and to environmental values. These concerns were misplaced – salinity has proven to be easily controlled and the water is less saline today than it was 35 years ago.
* The more contemporary scare centred on supposed global warming leading to climate change that would reduce the water available. Rainfall data has proven this to be unfounded – there has been no reduction in precipitation across the basin.
* The cost of the Basin Plan in de-rating the region’s agricultural potential has been enormous, especially to the once prosperous communities living within the region. In aggregate terms this is likely to be in excess of $3 billion per annum with a serious impact on the ability of Australia to take advantage of the export opportunities stemming from the rapidly developing nations to our north.
* The measures adopted in the Basin plan were reactions to ill-founded and disproven concerns about human damage to the environment. The Commonwealth should cease incurring costs in preventing water use for irrigation and should start re-selling the water it has banked to those willing to pay for it.