Submission to the Murray Darling Basin Royal Commission

Ruby Davies, April 2018.

As a visual artist I have photographed and painted the Darling River since I first saw it as a 'chain of waterholes' in the mid 1990's south of Wilcannia. My pinhole photographs of the Darling in flood (1998 to 2000) and the completely dry river bed with about 150 Wilcannia locals standing witness, (September 2007) are in the collection of the National Gallery of Australia in Canberra. While I've spent most of my adult life in Sydney, I grew up on the Darling on two grazing properties along the river. Over the years, while visiting family on the Darling I have witnessed events never seen during my childhood; Blue-green algae infestations, increasingly low water levels especially over the summer months, river water polluted with pesticides and chemicals making it unfit for human consumption, towns and grazing properties sinking sub-riparian bores adjacent to the river in order to have a supply of non-polluted water, and the river becoming so low that many of the grazing properties regularly loose their boundary fence. This often means de-stocking in hotter and drier months, thus increasing grazing pressures.



Image taken during the summer of 1994. My brother took the whole family to a bend in the river where we had never seen the water so low. This was our first indication of the extent of water extractions upstream.

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When the Lynton Besser Four Corners program "Pumped" first aired my initial response was shock and outrage. Like many I was shocked to learn that not only were the meters installed many years earlier not working, but that efforts to fix them had been sidelined by NSW water officials. Outrage, to hear Gavin Hanlon discussing his strategy of fabricating inclusivity with a diversity of river stakeholders, while declaring allegiance to only this select group of cotton irrigator lobbyists. On reflection however, the revelations contained in Pumped, in ABC's Lateline, the Ken Mathews Report and many other news events and reports to follow, **served as confirmation of the increasingly distressing water experiences of many people up and down the river over many years.** It confirmed what many had suspected but been unable to illuminate as publicly or convincingly.

When one reads Murray Darling publications there is an **overwhelming disconnect or contradiction** between the dire reality of water events occurring on the river and the positive environmental declarations from official publication. Declarations of sustainable environmental outcomes for the river into the future, the importance of consultations with Indigenous nations regarding 'cultural flows' and positive social, economic and spiritual outcomes - versus the reality below Bourke of massive algal blooms, dry riverbeds stretching for kilometres, rivers reduced to stagnant waterholes over many years each summer, Indigenous communities living with very low rivers or no river for far too many years with little consultation as to their opinion.

In this submission I address the following points of reference;

6. Any legislative of other impediments to achieving any of the objectives and purposes of the Act and the Basin Plan ... and any recommendations for legislative or other changes if needed.

The following series of events have been widely covered by media and raised in parliament. Over the years I have witnessed first-hand lower and lower volumes of water in the river. I have toured Darling Farms and visited the junction of the Murray with the Darling near Mildura as part of my research into a Masters paper, "Contested Visions, Expansive Views: The Landscape of the Darling River in Western NSW." (USYD, 2005). My interest in the following issues comes from a deep concern for the future of this iconic river that for millennia had bought fresh water across this semi-arid landscape.

6a. <u>Federal Government paying above market price with taxpayer funded money on unreliable water at Tandou.</u>

The sale of water licenses from a cotton farm on Tandou Lake near Menindee has raised concern firstly because the government appears to have paid almost twice the current market value for licenses of these types*. The government disregarded recommendations from their own valuers when setting the much higher price – paid by the then Federal Water Minister Barnaby Joyce for water from the \$13 billion intended to return environmental flows to the river.

^{*}Terry Korn, Briefing Note – Tandou water purchase, 22 October 2017

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Secondly, a number of experts have pointed out that because of water extractions upstream that the water paid for at Tandou is in fact 'ghost water' and unlikely to reach this part of the Darling. Anne Davies writes, "experts now fear the Tandou purchase will help the federal government meet its water saving targets on paper – the buyback was for 22,000 megalitres, the equivalent of 9,000 olympic swimming pools – but will do little to improve the environment." Anne Davies, The Guardian Friday 24 October 2017, "Governments likely to have bought 'ghost water' in \$78m deal".

If this water is in fact unreliable and rarely expected to supply environmental outcomes, then it can't be reliably counted in the water recovery figures and more environmental / community water will need to be purchased. In the meantime, taxpayer money has been squandered and large multinationals' (Webster Group in this case) have received an enormous windfall.

The Deputy MP needs to justify why he paid such an inflated price, and if Webster's donates to either the Liberal or National parties, and if so how much?

illegalities are proven, the taxpayer money needs to be re-payed to the Commonwealth and used to purchase **effective environmental/community water**.

Peter Hannam in the SMH details two other irrigation properties where Joyce as Water minister signed off on excessive amounts of money paid to large water holders on both the Condamine-Ballonne* in southern Qld and on the Warrego in western NSW. In both these cases the water purchased is described as 'unreliable'. Peter Hannam, SMH 21 March 2018, "Barnaby Joyce's department paid 'tens of millions' too much for water."

*Maryanne Slattery and Rod Campbell, The Australian Institute, "That's not how you haggle; Commonwealth water purchasing in the Condamine Balonne", 20 Mar 2018. This article outlines the many inconsistencies and the overinflated price paid for water in the Condamine-Ballonne.

Mark Zanker writing in Independent Australia suggests that a strategic plan may be in place to deliberately purchase 'unreliable' water in locations away from cotton producing valleys, leaving more water in those valleys. The concern of the irrigator seems to be that if water is purchased for the environment in a cotton producing valley then there is less water in that valley for irrigation. The Commonwealth environmental water flows past the pumps to targets downstream. In other words, maximising spending on 'ghost' water is a 'win' for the upstream cotton towns, favouring irrigators over all other businesses and communities on the river.

Mark Zanker writes, "On its face, apologists for this purchase price (at Tandou) may say, as the Department of Agriculture website suggests, that it is a good outcome environmentally because it will aid the attainment of the triple bottom line that the Murray Darling Basin plan is premised upon — in particular, that there should be no adverse socioeconomic effects from environmental water recovery. But that seems only to hold true for areas upstream of Bourke. Downstream, there will be no change in environmental conditions at all if, as has occurred in recent years, no water flows past that location. One also might wonder what traditional land owners along the Darling think of this outcome.

ABC Rural has reported <u>NSW Water Minister Niall Blair</u> as describing this transaction as a "<u>win-win proposition</u>" — but for whom he did not say. If, as Rooney stated, the price paid is 2,500% above running average prices for water in the Lower Darling, there appears to be one clear loser — the Australian taxpayer." Mark Zanker, Independent Australia, "The Murray-Darling Basin: Water, markets and money." 28 July 2017.

6b. Changes to the Murray Darling Basin Plan - the Northern Basin Review.

The Murray Darling Basin Plan for the Northern Basin agreed that 390GL was to be returned to the river above Bourke. In late changes to this agreement the figures were altered to 320GL (70GL less for the environment and more for cotton production).

The MDBA made these changes based on arguments that less water for cotton-production was detrimental to local towns, communities and businesses above Bourke such as Dirranbandi, Collarenebri and others. The ministers concerned have however showed absolute disregard for sections of the river below Bourke; at Wilcannia, Broken Hill, Tilpa, Louth, Menindee and down to Pooncarie. **These inequitable and undemocratic actions** raise suspicions in the general community of financially beneficial and perhaps corrupt links between state and federal ministers and the players with the most money to spend. As Daniel Connell wrote in 2015, "... in practice, irrigators as a stakeholder group have continued to have no difficulty in having their views taken into account by policy makers." Daniel Connell, Science Direct, "Irrigation, water markets and sustainability in Australia's Murray-Darling Basin." p138.

These lower figures for the river were subsequently disallowed in the senate. Enquiries are urgently required as to 1. Which interest groups were responsible for driving these lower figures, and 2. Were Indigenous interests and grazing and other businesses downstream in agreement or even consulted about the lower figures? And if not, why not? This wrangling over water in favour of large scale irrigators is another impediment to achieving the stated environmental, social and Indigenous outcomes of the Basin Plan.

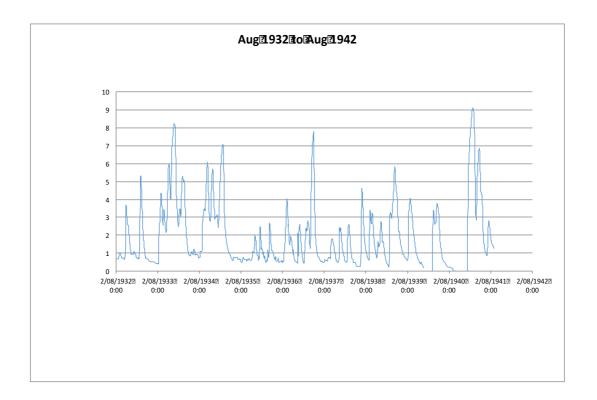
The so called 'toolkit measures are a total nonsense. Most of the provisions discussed in the 'toolkit' were already provided in the original MDB plan for the Northern Basin. They are offered again in a 'sleight of hand' in return for LESS water. Go figure!

6c. Reversal of the Barwon Darling Water Sharing Plan, 2012.

Late changes to the Water Sharing Plan in essence mean that large volumes can now be taken from a very low river. At flows of less than 1200ML and down to 350ML water can now be pumped out, parked in large off-river storages to irrigate cotton. These changes to the original plan reverses the work done to ensure that pumping arrangements leave particular amounts of water in the river (a cap on extractions) to ensure flows below irrigation pumps. The original decision stipulated that only smaller 6 inch pumps could remove water below 1200ML and down to the 350ML level - and that larger pumps (such as the 26 to 36 inch pumps seen on Four Corners "Pumped" and various Lateline programs) could only pump once the water

was **above 1200ML**. These changes remove all protection for low river levels and can be seen to be sucking the very bottom out of the Darling below Bourke. This has starved the small towns, grazing properties and Indigenous communities at Louth, Tilpa, Wilcannia, Menindee, Broken Hill and down to Pooncarie. It appears that these changes were **lobbied for by large multinational cotton producers who have the ear of government and whose profit margins are made to the detriment and destruction of downstream communities.** The above changes are another impediment to achieving the stated environmental, social and Indigenous outcomes of the Basin Plan and need to be fully investigated.

The following two graphs and the coloured photograph are presented to illustrate the effects of 6b. and 6c. above.

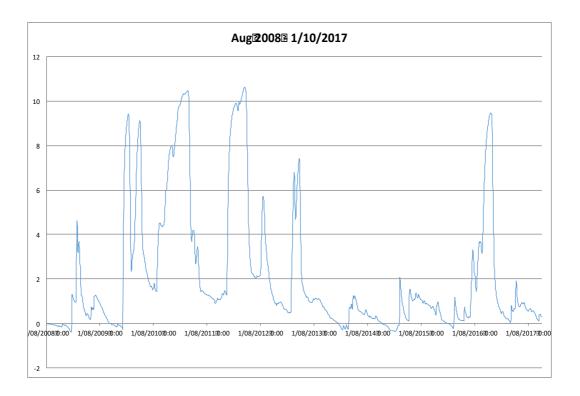


NB. The gaps in the graph between 1939 and 1940 represent times when no data was collected

Both graphs show river heights at Wilcannia; the first shows ten years during the 1930's and the second, ten years from August 2008 to Aug 2017. In the 1930s the river height was generally low but the peaks more frequent (three or four peaks a year) and the river peaks ranged from 2.5 up to 8.0 metres. While the river was sometimes below one metre in the 1930's it NEVER dropped to ZERO FLOW.

In the recent graph below, you can see that the river height registered as a ZERO FLOW each summer in 2008 and 2009 and from 2013 to the present day. From

August 2013 to August 2016 it barely reached 1 metre. These No Flow events since 2013 at Wilcannia are the direct consequence of the 2012 changes to the Barwon Darling Water Sharing Plan where large pumps were now able to pump the river down to 350ML. The result is that the last dregs of the river disappeared into cotton storage tanks and the river below Bourke becomes a series of long dry stretches without a drop of water; such as we have seen in the media and on social media sites at an increasing rate in the last year.



There appears to have been no consultation with river communities below Bourke for these changes and certainly no consultation with Indigenous stakeholders. The changes appear to have been lobbied for by cotton interests upstream from Bourke

NSW ICAC is currently

investigating events surrounding these changes to both the Barwon Darling water sharing plan and the Northern Basin Review, both of which greatly favour irrigators. This needs serious investigation as to why these changes were made and who was driving the changes. These events have destroyed any confidence the public has in the MDB Plan, Water NSW, Federal Water and Agriculture ministers and is another impediment to achieving the stated environmental, social and Indigenous cultural objectives of the Basin Plan.

From the Guardian; "A water-sharing plan for the Barwon-Darling was altered by the former <u>New South Wales</u> minister for primary industries, Katrina Hodgkinson, even though public consultations on the draft plan had ended and her bureaucrats had already submitted a draft for her to sign.

The changes made it more favourable to irrigators and delivered valuable additional water during low flows. According to some modelling it may have increased legal extractions by irrigators by 32%. But even though the public process had closed, an irrigator lobbyist, Ian Cole, who was chair of the body representing large irrigators, Barwon-Darling Water, ramped up his representations directly to the minister. The documents show he presented to the panel and wrote to the minister on at least two occasions during 2012, after the public consultation process had closed, lobbying for further changes. Anne Davies, The Guardian 8 Feb 2018, "NSW minister altered Barwon-Darling water-sharing plan to favour irrigators."

The ability of irrigators to use large pumps with B class licenses to extract water down to 350ML needs to be immediately reversed and the original agreement reinstated. If Ian Cole and others are found to have acted beyond the law, it is hoped that the law is able to deal with this effectively.

A perhaps unforeseen consequence of setting a cap on water pumping, even at the 1200ML level is that the Darling below Bourke is now kept at a constant low even in the cooler months. What appears to be happening is that as soon as water rises above 1200ML the pumps are turned on, leaving only 1200ML and since the 2012 changes only 350ML for the Darling below Bourke. In this way the banks of the river remain dry and prone to slumping, as the moisture that stabilises them is no longer rising up and down the banks in the way that it has for millennia.

Below is a photograph I took in September 2007. The river had been in this state for the previous eight months at Wilcannia and townspeople were very keen to pose as witness to this water loss. The photo gives an idea of just how long the effects of upstream over-extraction have been occurring.



Ruby Davies, *Water as Life; the town of Wilcannia and the Darling/Baaka, September 2007.* This photo is in the collection of the National Gallery, Canberra.

6. Continued ... Recommendations for legislative or other changes.

- 1. Renaming what is called Environmental water to also include water for communities and for Indigenous cultural uses. This to also include water for tourism, bird-life and water at heights and frequencies to ensure native fish breeding.
- 2. At the moment the amount of water extracted is securely held in WAL's and various agreements in the different sections of the basin in terms of amounts that can be legally extracted from the system. This in principal leaves only whatever is left-over for environmental, community and cultural uses. As discussed by Sandra Postel, director of global Water Policy Project; "over the last (20th) century, societies the world over assigned value to water only when it was extracted from its place in nature and put to work on a farm, in a factory, or in a home. Little or no value was attributed to water's role in its place in nature for sustaining fisheries, habitats, health, recreational values and a host of other goods and services." Sandra Postel, "Replenish: the virtuous cycle of water and prosperity." blog.nationalgeographic.org

There have been some moves to give rivers the same legal rights as humans in an attempt to save them from exploitation and ensure their future survival.

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3. Having spent some time on various government websites regarding river flows, heights etc., I suggest that it is now possible to create a user friendly phone app where interested people could access realtime images of rivers, river heights and flow volumes at the various measuring sites already established throughout the basin. While this data is currently available, the format and user-friendly aspects could be radically upgraded, allowing general access to water events on the river.

4. Another major impediment to the Basin plan has been the glaring conflict of interest in both NSW state and the Federal level of the same minister holding both the Agriculture and Water portfolios. A recap of Joyce speaking in a Shepparton Pub:

"Mr Joyce told a gathering in a pub on Wednesday evening in the northern Victorian town of Shepparton, that it was important the Nationals had taken control of the Murray Darling Basin Plan. [We've got] \$13 billion invested in it," Mr Joyce said, referring to the plan, according to a recording by the ABC. "We've taken water and put it back into agriculture [ministry] so we can look after you and make sure we don't have the greenies running the show, basically sending you out the back door ... Our focus is to ensure your economic fortunes are advanced from what we do." SMH, Peter Hannam, "Stop 'greenies running the show': Joyce unloads on Four Corners water report." Updated 27 July 2017 — 10:16pm

"Labor demands Barnaby Joyce be kept from water portfolio". Oct 30 2017. www.adelaidenow.com.au

- 5. Food & Fibre; As a step towards increased transparency figures for food production need to be separated from those of fibre aka cotton. The irrigation lobby have combined Food and Fibre to disguise the actual water used by the cotton industry.
- 8. In Relation to any found instances of illegal take or work, whether appropriate enforcement proceedings have been taken in respect of such matters and if not why not.
- 8a. <u>Illegal floodplain harvesting and money squandered on 'efficiency' measures.</u>

The Wentworth Group of Concerned Scientists, discussing the harvesting of floodplain water for cotton production, point out that in normal circumstances this water would find its way back to the river and add to the environmental and community flows. Surface water harvested needs to be factored into each users' allocation, not just added to it - or allowed to flow without interruption back to the river.

Further they point out that in return for often large amounts of Commonwealth and taxpayer money paid to irrigators for structural on-farm 'efficiencies', that LESS water should then be extracted by the irrigator – or the Water Access Licences (WAL's) reduced - so that more water stays in the river. What is largely believed in the wider community is that more water is taken by irrigators, more acreage planted to cotton and more profit made by the irrigator.

There are currently five persons being investigated in two states by a number of organisations, some civil and others legal proceedings.

Lateline, Kerry Brewster, posted 31 August 2017, 10:20pm; "Murray Darling Basin Plan a failure: Farmers claim water backed up in Queensland.".

An expert from The Guardian, by Kerry Brewster; "For the past 18 months, an expanding team of undercover detectives, cybercrime experts and forensic accountants have been investigating Norman's business on the Qld / NSW border ... on the McIntyre river. The investigation has focussed on whether Norman Farming misused upward of \$25m in Murray-Darling basin infrastructure funds that were supposed to make the irrigator more efficient and deliver water back to the ailing river system downstream." Kerry Brewster, The Guardian, Sunday 8 April 2018, "One of Queensland's largest irrigators expected to be charged with fraud."

The outcome of these five cases will indicate just how serious the authorities are in serving appropriate enforcements on parties found to be guilty. These activities will be closely scrutinised, not just in the Murray Darling Basin but across a world increasingly concerned with food and water shortages and security. One of the issues is whether the relevant authorities have the power to prosecute effectively.

The following are excerpts from the MDBA Compliance Strategy April 2014. (mdba.gov.au). In general, the document states that compliance is based on an educational, voluntary and civil, rather than legal compliance. In section Assurance Reporting it states ... "Ensuring transparency and accountability to the public is important in building confidence that the objectives of the Water Act and Basin Plan are being achieved." And further under, Special Powers ... "the Water Act provides for a civil rather than criminal regime to manage non-compliance." It is only towards the very end of the section in Criminal Provisions, that it states, "The Water act does not create criminal offenses for contravention of obligations under Part 2 of the Water Act ... however certain conduct may constitute an offence under other Commonwealth legislation, including the Criminal Code Act 1995 or the Crimes Act 1914 under state or territory law.

The legal ineffectiveness of the Water Act and MDBA compliance strategy has resulted in large irrigators manipulating the system for their own benefit. If the legislation continues without effective legal powers, unlawful acts may not be able to prosecuted with any effect and abuse of the system will continue.

Total cancellation of Water Access Licences and jailing of offenders is the only way in the current conditions of water theft and corruption allegations to ensure that public confidence on the Basin Plan can be recovered. The cancelled WAL's will then be owned and managed by the Commonwealth Environmental Water Holder who is tasked with bringing the MDB back to full health and delivering environmental and community water where it is fair and equitable.

8b. Inequitable use of water resources.

It appears that governments, government departments and individual ministers have favoured wealthy cotton irrigators over other water users on the river. It also appears that groups of irrigators have knowingly and deliberately acted to influence decisions of government to financially favour their own interests. This has involved falsifying figures in the case of **quoting averaging river heights** to grossly disguise percentages of water used by irrigation verses downstream uses. Irrigators figures include water volumes of two massive floods in 1950 and 1956 to override the extreme low water levels from the late 1990's onwards. Irrigators declare 6% as the amount taken by irrigation in an average year leaving the rest for the river! Anyone who knows the river below Bourke understands this is dramatically falsified. It appears however, that this information was supplied to ministers, including the NSW minister for water Niall Blair to falsify amounts of water that could be removed from the Darling in the final version of the Barwon Darling Water Sharing Plan, 2012.

From a report by Slattery and Campbell; "Amid claims of theft and mismanagement of water in the Barwon Darling River system, politicians have claimed just 6% of water is available for production, leaving 94% of water for downstream users and the environment. These claims are based on flawed analysis, with two large floods in the 1950's skewing the long-term average flows and masking the reality." Maryanne Slattery and Rod Campbell, "Remember the '56 flood? How much water flows to the environment in the Darling Barwon system?" The Australian Institute, 19 December 2017.

The lower figures at Wilcannia from the 1990's onwards are the direct result of increased irrigation upstream. In 1983 Cubby station was formed in Queensland with the amalgamation of 12 grazing properties giving a total of 51 Water licenses. It is currently licensed to extract 460,000ML of water per annum from the Culgoa.

Irrigators conspired to mask their extraction rates by deliberately including the large floods in the 1950's to falsify their figures. People deliberately falsifying decisions the MDBA itself declares should be based on the best science, need to be held accountable to the greatest extent of the law. Businesses that proclaim jobs, profit and growth and in the process destroy downstream river environments, communities and Indigenous cultures will not be making profits if the damage bills downstream are factored into the equation. It is important therefore to monetise these damages and factor this into upstream financial plans.

13. Any other Related Matters.

13a. The Murray River to Broken Hill Pipeline.

The \$500mill pipeline travelling 350 kilometres uphill from the Murray appears to have been lobbied for entirely by irrigators upstream from Bourke. Like the changes

to the Barwon Darling Water sharing plan and the Northern Basin Review this appears to be an outrageous expense to once again secure more water for irrigation.

The community in Broken Hill, the Major of Broken Hill, the Indigenous communities in Wilcannia and Menindee, the community along the Murray and graziers along the Darling are all strongly and vocally opposed to the pipeline. They realise that once water can be supplied to Broken Hill without having to travel the length of the Darling – that water may no longer flow past the weir at Bourke.

Investigations are needed as to which groups actually lobbied for the pipeline. Questions need to be asked about the mining interests that appear to be receiving water from the pipeline. This is particularly important as Broken Hill requires approximately 10,000ML per annum while the pipeline delivers much more than this. The tender process awarded to John Holland also needs to be investigated to ensure there are no questionable dealings.

Despite public and vocal protests against the pipeline, construction has already started and the government seems determined to continue on this course.

13b. <u>Is water hungry Cotton the answer in our dry continent?</u>

In a low rainfall continent such as Australia if we are to continue providing clothing for the ever increasing world population, a long term assessment and overview of the factors that will best work into the future needs to be carried out. It is highly likely that water hungry cotton may not be the best answer. Recent moves are underfoot to revive the production of hemp. It uses much less water than Cotton, (2.179 litres/kg for Hemp compared to 10,000 litres/kg for Cotton) and about four times more hemp can be produced on the same land area.

13c. The future of ring-tanks – off river storage dams

I feel that many people seeing aerial images of the vast expanses of water in storages for the first time on Four Corners and various other programs would have been totally horrified. There is the obvious issue of evaporation; and as cotton is grown over the summer months and the 'ring-tanks are quite shallow, evaporation is very high.

Then there is the issue **of water privatisation** of what is considered by many as a **public resource.** With privatisation comes legal rights and entitlements, which appear to put the concerns of the water holder above that of other users and of the river itself. For years' recreational fisher people, tourists, birdwatchers, travellers and increasingly 'grey nomads' have visited the Darling. This can only continue if the river is in a healthy state. A quick search of google earth can show images of the Darling and other rivers bereft of water, while at this same time, irrigation storages are full.

An agricultural system is unviable if a few upstream, who are protected by governments are able to profit while downstream communities face water shortages and privations and the river itself is experiencing destructive changes that will COST

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future generations millions to fix into the future. The destruction of the river that supplies the water makes no sense except the purely economic.

In years to come we will look back on the whole greed and corruption chapter in Australian industrial agriculture with horror. Cotton which uses almost the same amount of water as Rice (a food product) will be seen as totally unsuitable way to use water in the driest continent on Earth.

13d. Positive aspects in this sorry saga.

As an artist it is important to focus on a positive future for the Darling River. The aesthetic power of this majestic river, weaving its way across the flood plain has made an impression on many over the years. The Bakindji name for the river reflects profound and continuing connections - their name Baaka (river) and Bakindji, (people of the river) interweaving river and people together – linguistically inseparable, gives great insight into the depth of feeling between a river and the people who have worked with it for thousands of years, keeping it in pristine condition.

Thomas Mitchell while travelling along the Darling, describes, "The river and its vicinity presented much the same appearance here as they did 200 miles higher up. Similar lofty banks, with marks of great floods traced in parallel lines on the clay sides; Calcareous concretions – transparent water, with aquatic plants – a slow current, with an equal volume of water – fine gum trees, and an abundance of luxurious grasses." July 2nd 1835

"The water being beautifully transparent, the bottom was visible at great depths, showing large fishes in shoals, floating like birds in mid-air." June 1st 1835

"I was proceeding with the intention ... to look for the Darling, when I suddenly came upon its banks, which were higher, and its bed was broader and deeper than ever! We had also arrived on it at a point occupied by a numerous tribe of blacks (sic), judging by the number of fires, which we saw through the trees. Their roads appeared in all directions, and their gins (sic) were fishing in the river at a distance. In short, the buzz of population gave to the banks, at this place, the cheerful character of a village in a populous country." June 4th 1835



Ludwig Becker, Water marks on the banks of the river Darling, 1861

A small drawing by Ludwig Becker, (above) who accompanied the fateful Burke and Wills expedition to Cooper Creek, **shows the parallel lines inscribed in the banks** (also described by Mitchell above). Mystified at first, Becker was able to illustrate how the lines which he describes as 'looking like colossal sheets of music' were created by the water level gradually falling each evening. These parallel lines were a feature of the Darling before the water levels were kept at a continual low level by various Caps on the system. In the 60's and 70's graziers were continually moving the small stock watering pumps up and down and back up again, to keep the tail pipes in the water. The water rising and falling, keeping the banks moist helped to stabilise them. Today banks are slumping as they are exposed and dry far too often, because of low water levels.

Unfortunately, what seems to be forgotten is that the river needs water to exist, to function. In the 2000 MDBC publication, "The Darling" in answer to the question, "What are environmental Flows?" Martin Thoms et al write, "From an environmental viewpoint, all water in an ecosystem is the 'environmental regime'. Historically, river ecosystems utilised every drop of water in the Darling Basin for some purpose. Flowing water, inter alia, shapes river channels, provides a refuge and stimulates important processes both in the river channel and on the floodplain, along its entire length – from the headwaters to its mouth." "The Darling", Murray Darling Basin Commission, 2000, Chapter 15, Environmental flows in the Darling River, p351.

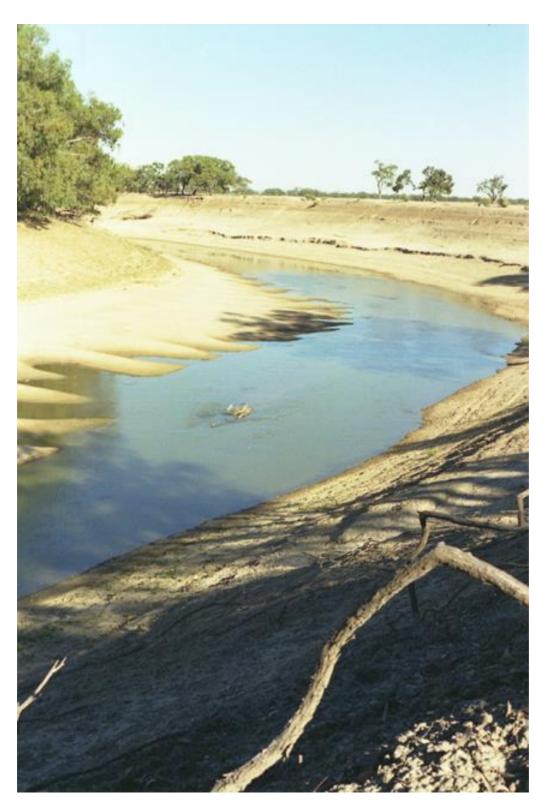
In summary, the Northern Basin 'review', the pipeline from the Murray, the reversal of pumping heights down to 350GL, the payment of double the money for unreliable

water and the present arguments to stop 605GL going to the Environment, all appear to be increasingly desperate acts to retain as much water north of Bourke for cotton production as possible. It appears that rather than being governed by democratically elected representatives, it is lobbyists and their employers in big business that are holding power over government systems.

Finally, in the following pages are a number of photographs that I have taken over the years showing extremely low water levels in the Darling. Photos of a desperately low river began in 1994 and continue to this day, with a few breaks for 1998 and 2010 floods. Far too little water has flowed beyond the irrigation pumps for far too long. The hope of many is that with the investigation of the SA Royal Commission and possibly a Federal legal investigation, systems can be put in place with real power to ensure that water at volumes that really assists the rivers back to complete environmental health can be achieved.

Ruby Davies

April 2018



Upriver from Culpaulin Homestead, December 1997.



My young niece, who was born during the first massive blue-green algae outbreak. Precious rainwater had to be warmed to wash the young babe, as the river water had turned to poison. Upriver from Culpaulin HS, April 2002. A whole generation has now grown up only knowing the river in this degraded state.



Downstream from Culpaulin HS, October 2002.



Upriver from Culpaulin HS, October 2002.





Upriver from Culpaulin HS, January 2003.



At Culpaulin HS, January 2003. The tin attached to the tree on upper left indicates height of flood in the 1970's.



Upriver from Culpaulin HS, December 2006. The river is completely dry.



January 2003, view looking downstream from the bridge at Wilcannia



My Brother and his son, downriver from Culpaulin HS, December 2006. They have been building temporary fences along the riverbed in an attempt to keep their sheep from going across to the neighbours property.



Down river from Culpaulin HS, December 2006, Building of riverbed fences.

A summary of allegations since July 2017:

- Large scale water theft, pumping during embargos and gauge tampering on the Darling and Barwon Rivers as aired on ABC Four Corners.
- Awareness in the community that the water sharing plans of the Barwon-Darling allow
 publically purchased environment water to be harvested under certain licence conditions.
 Protections of environmental water were in the plans when they went on public display, not
 in the final plan.
- In 2014 the NSW government passed legislation that allowed the millennial drought to be excluded from the water data set, creating incorrect figures and ignoring the impacts of climate change to the basin.
- NSW elected representatives changing river rules to make them more favourable for powerful irrigators in NSW as reported in the Daily Telegraph and the Sydney Morning Herald. Illegal flood diversion earthworks were retrospectively legalised by the government. Kevin Humphries referred to ICAC.
- Senior public servants in NSW offering confidential information to irrigator lobbyists as revealed by ABC Four Corners, Gavin Halon resigns.
- That water compliance teams in NSW have been gutted as reported by ABC Four Corners and the Guardian Australia.
- Ken Matthews interim report came out strongly against noncompliance within DPI. He described the need for "systemic changes" in the departments.
- Wentworth Group of concerned scientists release interim report and raise concerns about rivers missing out on 300GL of return flows due to 'efficiency measures', and exposing that as of January 2017 each irrigator in the basin has received an average of \$400,000 in buybacks and efficiency subsidies (could go to \$700,000).
- Birdlife Australia report calls on the Australian Government to reject the MDBA's recommendation to reduce the amount of water for the environment in the Northern basin by 70GL per year. The report classifies the Macquarie Marshes as a key biodiversity area 'in danger' and the Gwydir Wetlands with a 'very high' threat rating.
- At the MDBA DPI Fisheries conference in Canberra evidence of the importance of environmental water to fresh water native fish is discussed, including a graph showing the Darling was dry twice in the 56 years from 1946 to 2002, and dry 15 times between 2002 and 2016.

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- Police raid Norman Farming, accusations of them using 25 million dollars received from the MDBA for on farm efficiencies to do 52 km of illegal earthworks allowing them to harvest entire floods. (as aired on ABC Lateline).
- The MDBA knew about problems on the Darling River through its Datacube project but doing little to intervene as reported by the Guardian Australia.
- The Federal Government spends \$78 million on water rights (nearly double the evaluation), from Webster's Tandou Station against the advice of its own experts as reported by the Guardian Australia. Websters were allowed to keep 22GL of water the govt purchased for the environment for an extra year so they could grow cotton (potentially worth \$20 million). Now referred to ICAC by the Greens
- \$500 million pipeline announced cotton Australia claim victory for NSW growers. Community concerns the Bakka will stop at Bourke
- Northern basin review (seeks to remove 70GL from northern rivers) tabled in parliament, disallowance motion tabled by Senator Hansen Young.
- Inland Rivers Network are taking Peter Harris to court for allegedly stealing 5 billions litres of the river.
- Children on the Lower Darling with serious skin conditions from water, and families needing to travel 200km to wash as exposed by Lateline
- The collapse of the entire Menindee table grapes industry as exposed by Lateline
- A scathing report on water compliance by the NSW ombudsman and the revelation that 2
 previous reports have been buried by the government, and remain buried despite an
 attempt by the Greens to have them exposed.
- South Australia launches a state Royal Commission into the MDBP
- Independent panel delivered a scathing assessment of the MDBA leadership in implementing the plan.
- Ken Matthews full report released, still concerned at the lack of action of NSW Govt in prosecuting compliance breaches.
- Release of the Wentworth Group report released, finds the entire \$13 billion dollar plan at
 risk. Report finds there was significant progress since 2004, but this progress has slowed to a
 trickle since the Basin Plan was adopted in 2012. Major changes are needed if the plan is to
 succeed.