

Statement for Murray Darling Basin Royal Commission

1. My name is William Brian Bates, usually called Badger (a nickname from childhood)
2. I was born 5/10/1947 in the Wilcannia hospital on the Barka (Darling River)
3. I was brought up mostly by my grandmother Granny Annie Moysey. She was recorded speaking Barkandji and talking about Barkandji culture and country by linguist Dr Luise Hercus in the late 1960's and early 1970's. Granny was born on the river at Toorale Station between Louth and Bourke, and belonged to the northern Kurnu dialect group of Barkandji. I was the last baby she reared up and she took me travelling through Barkandji country and neighboring people's country. I grew up in Wilcannia, Louth, Bourke, and on stations between Wilcannia and Bourke, and visited relations in Cobar and Murrin Bridge. My grandmother never lived on a mission, and stayed away from authorities. She took me and travelled around with me to stop the welfare stealing me and putting me in a home to become one of the stolen generation.

I am a director of the Barkandji Native Title Prescribed Body Corporate (PBC), Barkandji were given native title to most of the Barka or Darling River and wide areas either side in 2015. I am on the Joint Management Committees of Paroo- Darling National Park and Toorale National Park, and I am on the Mutawintji National Park Board of Management, I have been on MLDRIN for about a year. I was an Aboriginal Sites Officer for NSW National Parks and Wildlife for 21 years, and since my retirement in 2005 I divide my time between sitting on Boards and committees, teaching young people about Barkandji culture, and my artwork practice that involves exhibitions, artist in residencies, workshops and public art works.

4. What the Barka or Darling River Means to Barkandji People –Our Cultural Values

Our Barka means everything to us, it is our mother. It is who we are. We take our name from it, Barkandji means people belonging to the Barka. The Barka was created when Kuluwarra let the Ngatji (Rainbow Serpent) out of his waterbag up near Bourke, and the Ngatji lives in it still. Thirri also shaped the channel, bends and islands of the river after the Ngatji went thru with the water. The Ngatji looks after us and we have to look after it, it is our traditional job to look after the Ngatji and the river and the other surface and sub-surface waters of the Barka and its floodplains. The Barka gives us healthy food and medicine, it gives us wood to make our artefacts, reeds to weave, it is where we go as families to swim, boat, camp, picnic, fish, go yabbing, and prepare and cook our traditional food. It is where we relax and enjoy our homeland. When we go fishing we go as a family and we sit and talk and remember and pass stories on about our ancestors and our land and water. If we catch some fish we light a little fire by the river and cook the fish and some johnny cakes and we sit and eat there on the river. We don't use plates or knives and forks, we just use our fingers and maybe a bit of bark as a plate. It is where we teach our children and speak our language. It is where we do our artwork, take photos, make videos, make songs and dances. We walk along the river and see where our ancestors cooked mussels or cut out a coolamon or a canoe, and we connect with them and use this to interpret and understand our landscape. For example, a shell midden means there is a stony bank in the river where the mussels live (this might be under water so you can't see it), and then you know that the deep bend up or down from the shell midden is where the cod will be hanging out cause they eat the mussels. So you know where to put your cod line in. We have many stories like this. The river is our memory, we walk along it and remember our history and our ancestors by looking at the marks and places.

I walk along the river and climb down to cut a boomerang out of a bent red gum or black box tree root, then sit on the riverbank and cut it out and shape it. When I do something like this I am looking after my river and my country, I can hear my old people talking to me, I can feel the slight breeze made by them moving around. It is what makes me who I am. Without water in our river the trees will die and there will be no more roots to cut out and make boomerangs. At night on the river I listen to the fish jumping up and I am happy. Or I hear the sound of the swans flying north to meet the fresh water coming down. From this I know when the fresh water is coming and how much, I feel life is right.

The young kids in Wilcannia use the town weir as a fish trap (Appendix 5), when the water is at the right level they shape the rocks into pools to trap the fish, this way of catching fish has been handed down through the generations. Stone fishtraps are not just at Brewarrina they are right along the Barka too, there is a good one in the river about 10 km below Wilcannia.

Our Barka is also very beautiful (Appendix 5), the water, the birds and animals and the huge river red gums are famous for their beauty, which gives us pride and happiness.

Without these things my people will be *buka*, they will not live.

5. What the river used to be like

When I was young we lived beside the river in tents, humpies and tin huts, and moved a lot, getting to know every bend in the river, and everything about the river, billabongs, creeks and lakes, the plants and the animals. The river was always fresh enough to drink and we could always get a feed of fish, or yabbies, duck or turtle or something. Our river water should be a slightly milky colour from the clay, settling to a clearer colour after freshes settle down. We used to catch fish with a line, or net, or if the water was still and clear we would use spears we made. Our fish are beautiful to eat, we used to get cod, perch, black bream, catfish and bony bream. We used to get buckets and buckets of yabbies. There were birds everywhere along the river, water birds like pelicans, swans, cormorants, ibis, cranes, herons, and ducks. Often we would see a kite hawk swooping down to catch a fish. There were also lots of birds that would come in for a drink at dusk or hang in the cool of the river red gums, like parrots, finches and cockatoos. There were lots of water rats and river goannas and water dragons, now we only see the odd old goanna. The water had lots of insects such as water boatmen, and lots of wrigglers, that you don't see now. There were lots of water plants in the river and mainly in the billabongs, the fish and other things eat these, but they are disappearing.

At Easter this year we were looking for some empty mussel shells along the river at Wilcannia to use for art work. There used to be huge numbers of big mussels along the river, but we realised that our mussels are nearly all gone, and the few left are small, round, and the shell is thin and blistered like they have been poisoned. Our people depended on these mussels to eat and for bait, and all the other animals depend on them for food. I was so sad I did an art work called *Fragile River*, which was about 30 hanging mussel shells polished and etched with animals that depend on the mussels for food, such as water rat, goannas, cod, perch, and water birds. I know that many of our other smaller shellfish have also gone, the river snail that we used for bait is now officially extinct due to bad water quality and no flows.

I remember the first carp in the 1970's, we couldn't believe such ugly fish. Now for every 10 carp we catch we might get one decent native fish. Black bream and catfish are nearly extinct in the river now, this has happened only recently because there is no water. So many of our plants and animals have gone or are just disappearing. These are a part of us, it is just the

same as losing a family member, or worse because once they are gone that is the end of our cultural life.

6. River Springs and Aquifers

When I was younger we could always drink the river water, but if the river was really low we used to dig holes along the bank and get fresh clean water from soaks or springs. The big water holes also linked in to these springs, so if the river stopped running for a while the big waterholes still stayed full of clean water because water seeped into them from the springs. This is where the cod stayed and waited for the next rise, this was their refuge. Now at Wilcannia for the last few years even our big waterholes have been drying up, and there is nowhere for the cod to go. When the river gets low and the blue green algae sets in, the Wilcannia Shire pumps water from a bore near one of these big waterholes. We know that they are pumping from the shallow aquifer that refills the big waterholes, we know they are all connected. We know this because of the stories handed down to use about the Ngatji or rainbow serpent, we know where Ngatji go and where the water is, both on top of and below the ground. These shallow aquifers are how the Ngatji travel. It is clear to us that we will end up with no water at all, because the aquifer fills from the river and floodplain in the wet, and then it seeps back out into to river in the dry. This is how our river works, it is all connected. But with no floods, no floodplain water, and pumping town water from the aquifer when the river is dry, we will end up with nothing to drink at all, and our fish, mussels, birds and everything will be gone, and our creator the Ngatji will leave us. We try and tell the water people this but they don't listen, they think it is just a blackfella's silly story.

7. Low Flows or No flows

The Barka nearly always had water flowing, we had big and medium floods and many small flows that kept it all going. Very rarely it would stop flowing but if it stopped the big waterholes were still good. It would only stop flowing for a while. Since 2012 we have seen the river completely dry up for miles and miles, and this just keeps happening now. The changes they made in 2012 meant that the irrigators upstream could pump out our small flows so we are left with nothing most of the time. The MDBA have studies that show how important the small flows are to the river, but they are ignoring their own scientists ¹. See Appendix 4 chart that shows the increase in no flows (when the river has stopped flowing) since the 1970's but mainly through the millennium drought and since the 2012 Basin Plan.

8. Water Quality

We did not have issues with water quality like we do now. Over the last few years they have put warning signs up all around the river near Wilcannia and elsewhere telling people the water is unfit to drink, unfit for stock to drink, and not to swim, or take fish or yabbies. They don't even bother to pull them down now because they are in force more often than not.

When I was younger we did not have blue green algae the river like we do now. The water was not salty like it is often now. We never heard of "black water events", this happens when there is a big flood after many years of no floods, they say it is natural but before it probably only happened every 100 years or so, but now happens every flood and kills millions of fish.

¹ Murray Darling Basin Authority. March 2018. Ecological Needs of Low flows in the Barwon-Darling. Technical Report.

We complain about the water quality but the MDBA and NSW DoI don't take any notice of us. They call us Traditional Owners but they don't accept we have any rights to manage the Barka or stop them ruining it for us all.

9. MDBA and NSW DoI consultation with Barkandji People

When the MDBA and NSW DoI consult Aboriginal people around the basin, rarely they come to Broken Hill, Menindee and Wilcannia. It is usually the same old thing. They give us hardly any notice or any agenda, they turn up with maps and charts and want us to give them feedback on things without being able to think about it and understand it. They hold separate colour coded meetings for the whitefellas and blackfellas. We never get any feedback, or minutes, so they could be reporting anything, we wouldn't know. And they never seem to take what we say into account. Like we have been telling them for years especially since 2012 that our river is dying for lack of water, so what do they do? Change the basin plan so they can take out an extra 70GL for the irrigators upstream. So whatever consultation they did with Barkandji people they just ignored what we said anyway.

For example in early August 2018 NSW DoI rang and said they wanted to meet with the Barkandji PBC in Broken Hill about the changes they want to do at the Menindee Lakes (this is one of the "water saving projects" that MDBA are using as an excuse for taking out extra water for irrigators). We had a Barkandji PBC directors meeting in Broken Hill on the Tuesday and Wednesday, so of course they wanted to meet us at short notice on the Thursday night at 7:30 pm after the other directors had left. There was only 2 of us and our CEO, we were the only ones invited anyway. We got the NT Corp solicitors to email then beforehand and ask for an agenda and what they wanted to meet about. They replied there was no agenda and it was only an information session. But when we got there they handed us maps of proposed new locations for regulators between Lake Menindee and Lake Cawndilla that we hadn't seen before and asked us for comment. All the locations have burials, middens, scarred trees, artefacts and ovens that will be destroyed, and they wanted feedback on the spot. We rejected most of it but when I went home I couldn't sleep because I was thinking what will they say we said, who knows, we never get any feedback or official minutes or anything. What I do know they will be destroying more of our sites including burials of our ancestors and we are powerless to do anything about it.

So about consultation, yes they consult but it is fake consultation, they only do it to tick a box and do as little consultation as possible and do exactly what they like no matter what we say.

You can see from the Menindee Lakes Business Plan stakeholder consultation table that the Aboriginal people are not rated as stakeholders that can "influence the decision making process", unlike landholders, irrigators, and government departments, it is there in black and white (Appendix 1). And the table also suggests they mainly just want to engage Aboriginal people in survey and monitoring of cultural archaeological sites that will be wrecked in the construction of the new regulators etc. They don't get that the whole Menindee Lakes is a place of special significance to us on many levels, and that it is part of our living culture, and that we should be consulted from the beginning about our needs for water in the lakes and for the fish and birds to be able to breed and exist in our country.

10. MBDA lack of understanding of our cultural values

The other thing about MDBA consultation is that they cannot understand or don't want to understand what we say anyway. When we talk about our cultural values they do not

understand. They only think in terms of economic or white fellas scientific values. The main thing is to make money and to have the environment of some areas looked after, areas 100's or a thousand kilometres from our land and river. They don't understand how important it is to us to have **our** river with fresh water in it, and our lakes, billabongs and floodplains as well.

Just one example of how they don't understand our cultural values. Kularku (brolgas) are Barkandji people, they are our relations, they tell us things and they dance for us. We don't kill them or eat them because they are family, they mate for life and they cry if one is killed. Brolga is the totem of one of our Barkandji families. When I was very young living on the river on a station called Winbar between Wilcannia and Bourke, us kids were allowed to go and watch the brolgas dance. But we had to behave just like we were told. We had to walk quietly up and sit down and watch and not talk. We thought of the Brolgas exactly if they were our elders, we had respect and love for them, and they showed us their dances. But now there are seldom any Brolgas in Barkandji country because they need water on the floodplains and swamps for food and shelter for their nests, and these days the floodplains don't get the water. To MDBA they think it is all OK if there is somewhere where the brolgas can live, but they don't understand how it breaks our heart if they can't come and live on Barkandji country like they used to. They just don't get that at all. At Toorale National Park near Bourke the Commonwealth water people wanted to stop the Western floodplain getting any floodwater, but this is the only remaining place for brolgas in our country. So we played up over the last 10 years and we have negotiated an agreement that some floodwater will still go to the Western floodplain on Toorale for the brolgas. But we only managed to get this small concession because National Parks fought long and hard with us, we could not have done it on our own because they don't listen to us or respect us and our cultural values.

11. MDBA lack of understanding or lack of care for Environmental values

The water from the floodplains, lakes and billabongs refill our shallow aquifers, which as I said before are linked to the river and are a necessary part of the river system and are our emergency water supplies for towns and properties. If the aquifers don't get water the river can't cope with dry times. Many plants and animals breed and grow in the lakes and billabongs, not the river channel, but they think of floodplain water as "wasted". They want to change the way the Menindee Lakes are operated as part of the "water savings" agreement for more water to be given to irrigators, but they are ignoring their own official scientific evidence. They want to only fill the lakes when there is a big flood, (well that is natural and they can't stop that anyway) and then they want to release the water using new bigger regulators so the water from Menindee Lake shoots out into the Barka 3 times as fast as it can now, and even want more water to go down from the main weir at the same time. This will erode our riverbanks and change the river forever. But MDBA have new official evidence (Appendix 2) that the Menindee Lakes are the main hatchery and nursery for perch in the MDB, this is our best fish to eat, the fish that has kept us all going for thousands of years, and the favourite fish for the tourists and anglers. But the way they now want to fill the lakes and then empty them so fast will not allow time for the lakes to be a nursery for any fish. The Menindee Lakes also used to be famous as a water bird habitat and breeding area, and was nominated as a Ramsar wetland, but the same goes for the birds, the water will be let out so quickly that the birds will not have time to breed and grow their young. So they are ignoring their own scientific evidence about how to manage the environment, they are going to destroy the fish, the birds and everything to save water for the cotton irrigators to the north.

12. MDBA lack of understanding or lack of care for our Economic survival

When they gave an extra 70 GL allowance for irrigators taken out of the Northern Basin in May this year, the media from David Littleproud and MDBA was all about the extra 200 jobs around Moree, Walgett etc. But what we can't work out is why can't we have jobs too? At Menindee was lots of vineyards, fruit trees and vegetable farms until about 10 years ago, as well as Tandou which grew cotton. This employed our people, all my nephews used to work in the vineyards and veggie farms, and all my nieces and cousins used to pick, sort and pack the fruit. On top of that there was employment in the tourism business for the Menindee community. Now that is all gone because there is no secure water supply and the Menindee Lakes are empty yet again because they pushed all the water out. Maybe 200 jobs have gone from Menindee, and they say there will be an extra 200 up the north. So why are Menindee people not worth as much as people around Moree etc.??? No-one can tell us that, but most Menindee people are either Barkandji or Ngiyampaa, and we feel that we are being targeted. We show politicians and water people all the dead fruit trees and dead vines, dead veggie patches, the tourist boats high and dry in the empty lakes and ask why but get no answer.

In Wilcannia we would like to have some businesses that depend on water in the river. One is tourism. My people already run a successful tourism business at Mutawintji National Park which is a range of hills 150 km from the river, but we can't do it at Wilcannia now because most of the time the river is dry, or has pools of toxic water with signs up everywhere warning people not to go near the water, or catch fish or yabbies. We would like to do some other business such as bush tucker and bush medicine but we need just a little bit of water to get the plants started to do that. We have a farm just near the town and it has a small water license, but there is no water to pump. It has all been pumped out up past Bourke. This lack of employment has huge social effects on the people of Wilcannia, people turn to grog and drugs because they are so depressed having no work and seeing the river the way it is and not even able to go fishing or swimming. Our elders are passing away and young people committing suicide because they are so sad.

13. Cultural Flow Project and Cultural Mapping Project and lack of Inclusion of Barkandji

Barkandji country was originally not included in the MDBA Cultural Flows project until I said last year at a MDBA meeting "how come you haven't got a study area on the Barka or Darling River? We want one at Menindee so Barkandji people can talk about the cultural significance to the river to us". So they gave us a little bit of money and we did a 2 week field project at Menindee with local Barkandji people and it was all written up by Susie Goff from MDBA and we were pleased. But then our report got binned – they said they couldn't use it because we said Barkandji people belong to the Barka and they didn't like that for some reason.

I went to a MDBA meeting in Dubbo where they showed us the draft cultural flows publication which stated that Murrwarri were the custodians of our water!!!! Can you believe that!!! It said they were the custodians from the Culgoa right through Barkandji country and down to the Coorong. I played up with them at the Dubbo meeting and they changed this wording a bit but still didn't put in anything from our cultural flows report that we worked so hard doing.

When you look at this cultural flows project it only has two study areas, one at a swamp on the Culgoa River and one on the Murrumbidgee. Nothing from the Barka or Darling River and nothing from the Murray, the two biggest rivers. MDBA say the NBAN and MLDRIN are independent but that is a joke, they get funded by the MDBA.

On the 1 August this year it was splashed all over the papers and internet about the MDBA study that recorded 26,000 sites in the Northern Basin. I didn't even know this mapping was happening, it didn't cover any of the Barka or Barkandji country, and the MDBA say they won't be doing anymore. I am sorry, correct me if I'm wrong but it looks like a stitch up for my people. It is favouring one group of people over others to make us all fight, I know these tactics, I have been involved in politics since the 1970's. Divide and conquer.

MDBA bring people from Canada to do this mapping and pay them when we have all the knowledge here, we are the knowledge holders of our country, we have archaeologists both Aboriginal and non-Aboriginal, we have anthropologists Aboriginal and non-Aboriginal, and we have more mapping experts than you can poke a stick at. But they get people from Canada, and I see this as another way of keeping us from being able to influence this cultural mapping.

I feel like they are just waiting for me and my couple of surviving cousins to pass away, they don't want to record what we know from the days when we lived all along the river and off the river. They put me on MLDRIN last year when they know my grandmother comes from the upper Darling and I come from Wilcannia, which is not in MLDRIN area. I asked if I could transfer to NBAN because that is more my county. NBAN said no because Barkandji were on MLDRIN so they couldn't be on NBAN as well, although they were earlier on, two of the founders of NBAN were Barkandji from Wilcannia, my brother-in-law Willy Riley and cousin William Charles Bates, both passed away now. Barkandji is a huge language group made up of 8 dialects, but we can only be on MLDRIN. But all the small groups around Brewarrina etc. are all individually represented on NBAN, even though they belong to the one language group. So as it stands MLDRIN says it only goes up to Menindee, and NBAN says it stops at Bourke. That means most of the Barkandji people along the Barka are not even represented by anyone, especially my people from Menindee up to Wilcannia and up to Bourke.

So much for MDBA consultation, they don't even consider most of the Barkandji people still living where they always have lived, on the Barka. Wilcannia people are not represented by NBAN or MLDRIN, we are lost. MLDRIN paid for me to go to Canberra last year to talk about the Barka, but every other thing I have done over the last few of years to try and get more water in the Barka I have paid for myself, even plane fares to get to Sydney to present petitions to parliament to try and stop the Wentworth to Broken Hill pipeline. We need MLDRIN to ask for extra money so they can represent all of the Barkandji people properly, not leave all of us from Menindee to Bourke unrepresented.

If you look on the MDBA webpage and look for their maps that show what traditional groups should be consulted over Water Sharing Plans, there are two maps, one for groundwater and one for surface water. The groundwater map covers the Darling Alluvial Plains from Bourke down to Wentworth, the shallow aquifers along our river, lakes and floodplain, the shallow aquifers that our Ngatji lives in. On this map we Barkandji are not in the list that needs to be consulted, it only lists the groups to the north of us. In effect this map says we Barkandji are not the traditional people of the Barka, even though we have a determined Native Title claim over most of it. The surface water map does list us, over the river itself, but with other groups.

14. Cultural Flows and Environmental Flows

Barkandji people at Wilcannia, Menindee and Bourke have been asking for cultural flows, but we can't even get anyone to give us any answers. Seems others get it but not us, no explanation even given. The Toorale National Park Joint Management Committee has been asking and asking for some answers but nobody will front our meetings.

Earlier this year the Barka had almost completely dried up with long stretches of the river with no water at all (Appendix 5), and the remaining pools had signs up everyone saying water was unfit for human or stock to drink, and blue green algae made it dangerous to swim in it or eat fish or yabbies. At Easter the Wilcannia people and some others blockaded the bridge on the highway for two days (Appendix 5), but only as directed by the police. So we blocked the bridge and marched across and back, and then let traffic thru, and so on for two days. Federal Labour decided to block the passage of the extra 70 GL to be taken from environmental water in the Northern Basin and given to the irrigators and State labour were supporting us, it seemed like they were listening to us.

Then an “environmental flow” was sent from the upper storages down to the Darling River, called the Northern Connectivity Event. I don’t recall this ever happening before, usually water we get is from natural rainfall events. It finally reached Wilcannia in June, a very small and very salty bit of water that had a strange bright clear look about it. It has been trickling down for two months now and it is getting saltier, which has puzzled everyone (see Appendix 3 of official figures from Wilcannia Times). Usually these days a small flow will be salty and nasty at first because all the bad water upstream is pushed down. But people can’t work out how come it is still salty, even getting saltier, which seems to go against the usual recent pattern. I know what is causing the salt levels, the long term lack of water in the river and shallow aquifers lets the salty aquifer escape and seep into the river, I was told this years ago by Boama the engineer who was in charge of the Salt Interception Scheme near Louth.

This “Northern Connectivity Event” was the subject of on-going media and patting on the back of the NSW DoI and MDBA. David Littleproud put out all of these media releases about what a good job they had done sending down this water, but he NEVER said it was too salty to drink. I think they just sent this little bit of salty “shut up” water down to get Federal Labour to rollover and vote in May for taking out the 70GL from our environmental water.

This little bit of salty water did nothing for our cultural values and not much good for the environment, there were no young fish coming down, just some old survivors, which were too fatty to eat. You can see the salt on the riverbank when the water goes down. We are still waiting for someone to give us an answer about where our fresh cultural water might be hiding.

Appendix 1- Stakeholders Table from Menindee Lakes Water Saving Business Case

TABLE 12: STAKEHOLDER MATRIX

Stakeholder	Communication Objective	Principal Communication / Engagement Strategy
Group 1: Stakeholders directly involved in commercial negotiations over buyback / structural adjustment.		
Webster Ltd (Tandou)	Commercial negotiations	Direct communications
Lower Darling Horticultural Group	Commercial negotiations and consultation in relation to ongoing service	Direct communications
Lower Darling Landholders	Consultation in relation to ongoing service	Direct communications
Group 2: Stakeholders directly involved in decision making processes during the project.		
Commonwealth, NSW & other Jurisdictional Governments	Seek key approvals throughout project via BOC/MinCo	Governance - representation on IJWG Formal Presentations & reports – key project milestones to IJWG.
		Media Releases Modelling liaison and review

Stakeholder	Communication Objective	Principal Communication / Engagement Strategy
MDBA	Technical liaisons in relation to key agreements and operating rules. Iterative modelling changes.	<ul style="list-style-type: none"> Direct communications
NSW DPI Water	Inform, provide direction and approval	<ul style="list-style-type: none"> Governance meetings including facilitation of Project Governance through IAWG. Review key documents
NSW Premiers & Cabinet	Inform and seek support	<ul style="list-style-type: none"> IAWG Formal Presentations, reports.
NSW Planning	Direct approval	<ul style="list-style-type: none"> IAWG – Meetings, presentations, reports Planning Focus meeting Environmental Assessment, AHIP.
NSW Office of Environment & Heritage, EPA	Inform and seek approvals	<ul style="list-style-type: none"> IAWG - Governance meetings, presentations, modelling progress and review Formal consultation v/v SSP approvals
DPI Fisheries	Inform and seek requirements as part of approvals	<ul style="list-style-type: none"> IAWG - Governance meetings, presentations, modelling progress and review Formal consultation v/v SSP approvals
WaterNSW	Modified Operational Plans, licence changes, potential project delivery	<ul style="list-style-type: none"> IAWG-General project communications, Institutional arrangements Future O&M - working group / task force leading to modified ops plan / strategy to achieve savings and appropriate water management. Potential project delivery – CEO to CEO
<p>Group 3: Stakeholders who are important to the Project, will be engaged and will provide input which may influence the project outcomes, but who may not necessarily influence the decision-making processes.</p>		
Aboriginal Community, Traditional Owners, Elders Groups	Inform and engage community, particularly during cultural heritage assessment in planning phase & cultural heritage monitoring during construction	<ul style="list-style-type: none"> Briefing to community groups Representative(s) on Regional Consultative Committee. Engagement during cultural heritage assessment & monitoring. Likely that an Aboriginal Heritage Impact Permit (AHIP) is required. An AHIP has statutory engagement strategies.
Menindee Township	Inform and engage the community, particularly regarding Menindee Flood Protection Works	<ul style="list-style-type: none"> Media Releases Council newsletters Regional Consultative Committee representation.
Broken Hill, Sunset Strip & Silverton Communities	Inform and engage communities	<ul style="list-style-type: none"> Media Releases Council newsletters Representation via a regional consultative committee.
Local Tourist Industry & Mining Industry	Inform and engage tourist and mining industry	<ul style="list-style-type: none"> Representation via a regional consultative committee.
Broken Hill City Council	An informed community	<ul style="list-style-type: none"> Representation via a regional consultative committee. Media Releases Council briefings.
Water Users	Inform and engage communities	<ul style="list-style-type: none"> Representation via a regional consultative committee. Media Releases

Ecological needs of low flows in the Barwon-Darling

Golden Perch

The Barwon-Darling River has been shown to be a significant source for Basin populations of golden perch (Zampatti et al. 2015; Koster et al. 2017; Thiem et al. 2017). Research from the past five years as described in Stuart and Sharp (2017) has rewritten the conceptual model for the life-history of golden perch in the Northern Basin. This revised conceptual model highlights that previous life-history models underestimated the distance which spawned golden perch larvae drift downstream. This new understanding is based on a detailed review of age observations of golden perch and monitoring of larvae drifting at Walgett in late 2016 following a significant spawning event. Analysis of this data suggests that spawning had taken place in the Barwon or even Macintyre system with larvae drifting up to hundreds of kilometres downstream.

The new research by Stuart and Sharp (2017) is developing improved flow management plans for golden perch, which is demonstrating the importance of protecting flow events in the northern Basin through to the nursery habitat of the Menindee Lakes to support strong age classes dispersing into the southern connected basin and back up into the northern Basin from the Menindee Lakes.

The new science by Stuart and Sharp (2017) has not been finalised and is not available at the time of this reports publication. However, an environmental flow requirement that forms just one aspect of the plan has been included in this report. This is a flow of 3,000 ML/d for at least 20 days at Mungindi to support regular local spawning cues, larval drift, and in-channel development of juvenile fish. This flow requirement would drown-out Mungindi weir (2,500 ML/d) to improve fish passage in the upper Barwon River.

It is important to note that this requirement forms just on part of the flow plan for golden perch. For the greatest outcomes substantial flows (beyond the low flow focus of this report) are needed to pass through to the Menindee Lakes and beyond. It is recognised that a series of flows over multiple years will be needed to meet the spawning, dispersal, nursery recruitment, and then juvenile dispersal of golden perch to achieve the system scale population recovery.

Fish movement opportunities

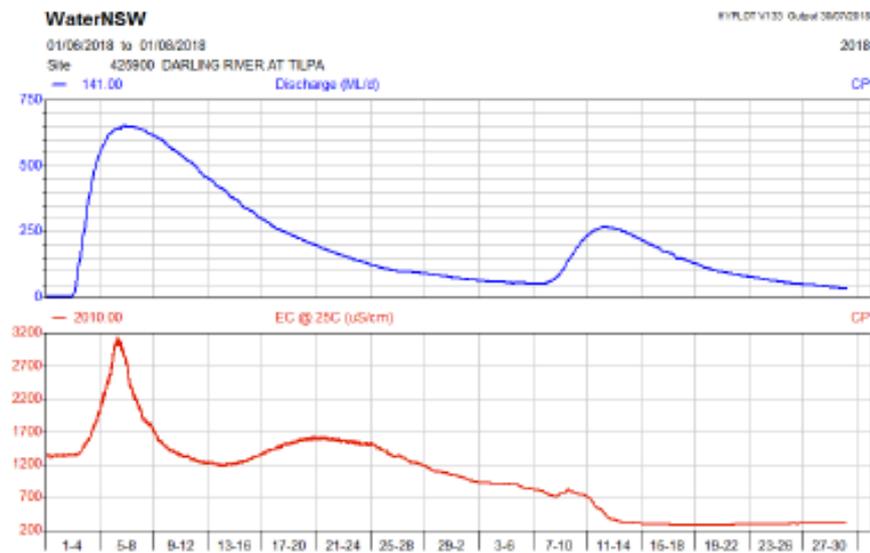
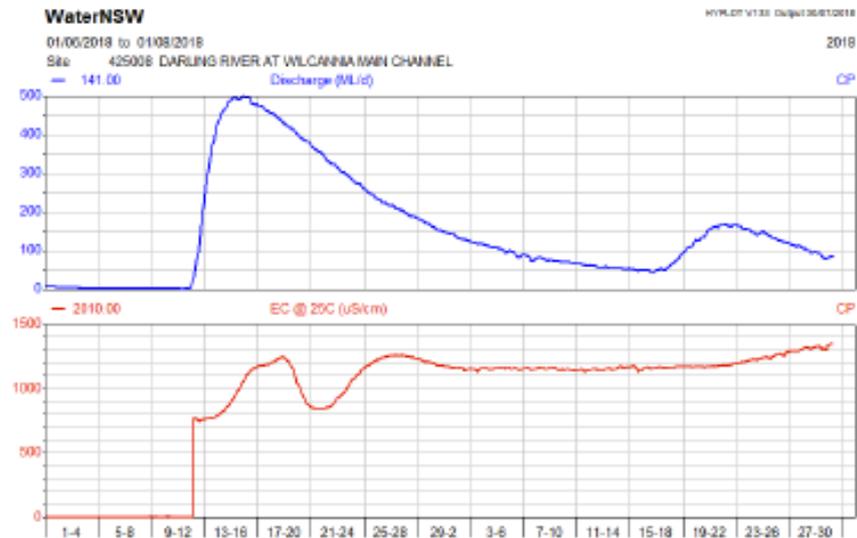
Salt levels in the Darling River at Wilcannia continue to rise

Before the rise in the Darling River at Wilcannia in early June, the salt levels (E.C Electrical Conductivity readings are used as measurement) were steady around 800-900 EC.

It was always anticipated, based on increases upstream, that there would be an increase as “old” water from the holes along the river would be progressively pushed downstream with the increased flow.

However, after two months it is unusual that the salt levels continue to rise at Wilcannia. The recorded levels at Louth and Tilpa though reduced dramatically after the two flows, the second of which was the Environmental flow. A more recent small rise is now falling rapidly at Wilcannia and still the salt levels rise.

Salt levels at Wilcannia measuring station downstream of the weir on Monday morning recorded 1352 (uS/cm) The attached graphs show a comparison between Tilpa and Wilcannia through June and July 2018



Water Report The river continues to fall now running at 0.22 meters with a flow of 84 megalitres per day on Monday morning. The salt level continues to rise with an Electro Conductivity (EC) reading of around 1352 uS/cm. Town water is currently sourced from the river. Garden watering should be postponed if possible until the water quality improves.

Appendix 4 –from Northern Connectivity Event Update 8- chart showing no flow events at Wilcannia (in pink) from 1973 to 2017 (note that the first 5 months of 2018 was no- flow)

Northern connectivity event **20 July 2018 update**



Australian Government
Commonwealth Environmental Water Office

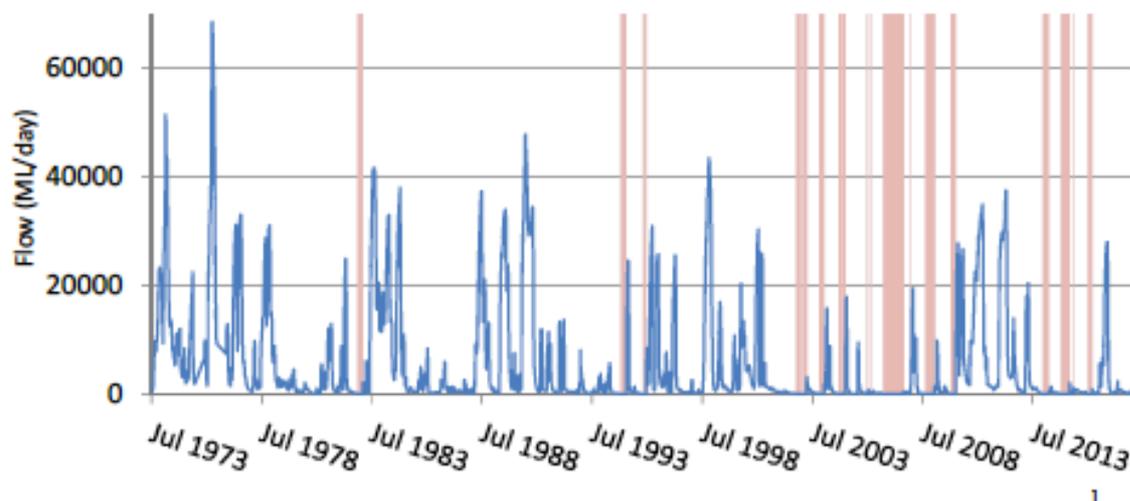
Northern connectivity event update 8

This is the eighth and final update on the northern connectivity event. This update provides: background to this flow event; a summary of flows, monitoring and community engagement during the event; and an initial evaluation of the event. A final evaluation report will be shared at the end of 2018 that will draw on reports and work from multiple agencies.

Background to the northern connectivity event

The northern Murray-Darling Basin includes the catchments of the Border Rivers, Gwydir, Namoi, Macquarie, and Intersecting Streams, which flow into the Barwon-Darling. The native fish community of the northern Basin is highly significant: it has five species that are listed as vulnerable or endangered; and the fish community overall is also listed as being endangered.

There is an increasing concern that recent flows in the Darling between Bourke and Wilcannia have stopped more often and for longer than previously in living memory. In addition to environmental implications, the river stopping is highly significant from a social and community health perspective. The pink vertical lines on the graph below highlight when the river ceased-to-flow at Wilcannia since 1972: with an increased frequency and duration of cease-to-flow periods in the last 17 years.



Appendix 5 - Wilcannia Kids using the weir as a fish trap 2014



Typical Barka river scene with a medium flow (2009)



Wilcannia in 31 March 2018 Protest March Across the Bridge and chant “What have we got? Nothing!! What do we want ? Water!!”



Just above Wilcannia April 2018 showing one of many stretches of dry river bed