Submission No 30

INQUIRY INTO FLOODPLAIN HARVESTING

Organisation: Wentworth Shire Council

Date Received: 13 August 2021

Inequitable access, undue influence and lack of transparency all raise questions as to objectivity and proper governance. Meanwhile, the cost to ratepayers, residents and local economy of Wentworth Shire has been burdensome and continues the inequity, even now.

History lesson

There has been much written about the 2012 Barwon-Darling Unregulated and Alluvial Water Sharing Plan and the many amendments made after public consultation closed, favouring upstream irrigators. For a good list of the most impactful changes, refer to the MDBA Technical Report[1]

The NSW Natural Resources Commission, in its July 2019 draft report, found that these changes had pushed the lower Darling river into drought three years earlier, acknowledging the "ecosystem in crisis". It's final report concluded that "The weight of scientific evidence is clear: while reduced inflows due to drought, upstream extraction, and climate change are all impacting the flows in the Barwon-Darling, the Plan provisions that allow increased access to low flows have resulted in poor ecological and social outcomes downstream of Bourke."[2]

Council was relieved to read the NSW Water Minister's response to the Natural Resource Commission and Vertessey reports into the mass fish deaths at Menindee during the summer of 2018-19:

"These actions will go a long way to improving low flows, protecting environmental water as it moves downstream, and supporting the recovery of the river system following dry conditions" and that "Both Vertessy and the NRC have recommended limits on the water taken by irrigators to better protect low flows in the Barwon–Darling River".[3]

When the Water Management (General) Amendment (Exemptions for Floodplain Harvesting) Regulation 2020 was introduced on Friday 7 February 2020, with no prior notice, consultation or explanation of its purpose, it was accompanied by a restriction on floodplain harvesting extraction that could have occurred without an exemption Regulation.

The restriction was then lifted almost immediately giving a right under the Regulation to conduct floodplain harvesting and legalising a form of water extraction that impacts on other water users' shares, is highly contentious, and unregulated through a licencing and measurement process.

The Regulation allows for unlicenced water take from floodplain works that have not necessarily been through any form of approvals process.

The lifting of the restriction on Monday 10 February prevented important first flush flows reaching Ramsar listed wetlands in the Macquarie and Gwydir catchments and decreased flow connectivity with the Barwon-Darling. The Lower Darling was still dry at the time.

[1] MDBA *"Ecological needs of low flows in the Barwon-Darling"* March 2018 pp.13
[2] NSW Natural Resources Commission *"Barwon-Darling WSP Review Final Report"* September 2019
[3] NSW Government response to the Vertessy Report and the Natural Resources Commission's review of the Barwon-Darling Water Sharing Plan, September 2019, DPIE

Floodplain Management Plans have not identified existing floodplain works built without approval. The Regulation gives an exemption to these types of works. This is unacceptable and it must be repealed.

The definition of a floodplain water supply work eligible for the exemption under the Regulation allows for works to be exempt from licencing that have never applied for approval and have never been assessed or granted approval.

The definition of eligibility should only include supply works constructed **with approval** on or before 3 July 2008.

Retrospectively legal?

In August 2017, then Water Minister Niall Blair legislated discretionary powers to pardon irrigators who have broken the law by committing illegal works to harvest floodwaters. Blair gazetted a Barwon-Darling valley floodplain management plan which gives him the power to approve flood works built illegally even if they do not comply with requirements prior to the plan.

"Under clause 39 of the new Barwon-Darling valley plan, a flood work that does not comply can be approved if "in the Minister's opinion" it is for an access road, a supply channel, a stock refuge or an infrastructure protection work."[4]

A legislative amendment permitting diversion works to be retrospectively made legal is of concern for two reasons:

1. It shows lack of understanding of the need for connectivity right across and along creek runners and river systems; and

2. It creates the perception that particular groups of stakeholders have greater rights and permissions in accessing water, to the detriment of other licence holders and domestic users downstream.

There remains very concerning issues about which structures have been approved and whether they have been assessed against cumulative downstream impacts as well as local environmental damage. No public information about approved floodplain harvesting structures is available and no clear direction about development levels (1994 or 2008?) has been provided to reassure communities that every channel, levee, road or airstrip on floodplains is not preventing the natural course of rainfall from making its way to the creek runners and river channels which then feed the Barwon-Darling river.

Many, many reports

Of particular concern in relation to transparency is the NSW Ombudsman report "Investigation into Water Compliance and Enforcement 2007-2017" and the unfortunately necessary update "Correcting the Record: Investigation into Water Compliance and Enforcement 2007-2017"[5], which executive

[4] The Guardian "*NSW minister gives himself power to approve illegal water works in Murray-Darling basin"* 3 August 2017

[5] Ombudsman NSW "Correcting the record: Investigation into water compliance and enforcement 2007-17" 8 March 2018

summary reported "The evidence suggests that the senior executives of WaterNSW failed to give the task of providing statistical information on enforcement actions sufficiently careful consideration."[6]

Indeed, Ken Matthews' Final Report "Independent investigation into NSW water management and compliance" lists "…increasing pressure from certain stakeholders to 'water down' key reforms, including reforms to water metering and improving transparency of information about water usage"[7] as an identified risk to continued momentum in implementing reforms pertaining to water compliance and enforcement management.

Ken Matthews highlights the issue of metering in his Interim Report, suggesting a "..no metering, no pumping"[8] rule. He reiterates the sentiment in his Final Report "…the introduction of a universal requirement for metering of water extractions and a significant improvement to transparency and public accessibility of information about NSW water usage."[9]

As Ken Matthews recommends "…NSW urgently engage with the MDBA to outline NSW's objectives and intentions….in relation to metering and seeking a reconciliation of their respective positions"[10]. He also offers advice in relation to procurement and recommends "…opportunities to collaborate in harmonization of remote sensing standards and procurement with other basin states and/or the MDBA should be explored."[11]

Matthews even suggested that "some of these reforms may not be welcomed by the current beneficiaries of an inadequate system" and that "…the industry's social licence to irrigate is at stake. However to rebuild public confidence will require more than incremental change. No change is not an option."

In response, then Water Minister, Niall Blair was reported to have said he would make it a top priority to ensure all large users in NSW install water meters within 12 months.[12] That was in 2017.

In the interim, diversion works and storage dams of extreme size and capacity have been constructed, some of which actively capture water which would naturally move through the catchment and into the river systems, and which has the potential, in certain cases, to inundate neighbouring properties during times of excessive rainfall or flooding.

Another MDBA report foreshadowed the ecological crisis we were to endure "…dry spells downstream of Bourke lasted considerably longer post 2000 than they did pre 2000…" and "..the average dry spell length as measured at Brewarrina almost doubled post 2000 relative to the preceding period, which would have significant socio-economic and environmental consequences in the lower reaches of the river."[13]

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[6] ibid pp.f
[7] Ken Matthews AO *"Independent investigation into NSW water management and compliance"* 24 November 2017
[8] Ken Matthews AO Interim Report September 2017
[9] Ken Matthews AO *"Independent investigation into NSW water management and compliance"* 24 November 2017
[10] ibid
[11] ibid
[12] ABC news "*Murray-Darling Basin: 'No change is not an option' says damning report on alleged NSW water corruption* 11 September 2017.
[1313] MDBA *"Observed flows in the Barwon-Darling 1990-2017: A Hydrologic Investigation"* March 2018 pp.25

The NSW Natural Resources Commissioner outlined fundamental failings embedded in the 2012 Barwon-Darling Water Sharing Plan:

"The (Water Management) Act makes it clear that water sharing is not about balancing uses and values, it is about firstly providing for the environment and secondly recognising basic landholder rights above other uses. The relevant water sharing principles are found in section 5(3) of the Act (water sharing principles), and are part of a broader set of water management principles. The Act specifies that:

> a) "sharing of water from a water source must protect the water source and its dependent ecosystems, and
>
> b) sharing of water from a water source must protect basic landholder rights, and
>
> c) sharing or extraction of water under any other right must not prejudice the principles set out in paragraphs (a) and (b)."

Further, section 9(1) of the Act provides that "It is the duty of all persons exercising functions under this Act:

> a) to take all reasonable steps to do so in accordance with, and so as to promote, the water management principles of this Act, and
>
> b) as between the principles for water sharing set out in section 5(3), to give priority to those principles in the order in which they are set out in that subsection."

Persons exercising functions under the Act, as contemplated by section 9(1), would extend to the Ministers, in making a new water sharing plan, amending a plan or extending it."[14]

The Independent Commission Against Corruption agreed. "The consistent failure by the department to act in accordance with the duty imposed by s.9 of the WMA (Water Management Act) represents a gross failure by the department to understand and fully implement the water management principles prescribed by the WMA and was inimical to the interests of good government and to the public interest."[15]

Water Quality

The health of our ratepayers has also been of major concern – particularly the more vulnerable children and elderly members of our communities.

Poor quality water, the result of inappropriate or insufficient flows along the river has been responsible for serious medical conditions, including severe skin infections resembling scalds and a recent diagnosis of bacterial meningitis – a disease prevalent in third world countries.

To make matters worse, the storage of toxic water (being the only available source for a protracted period of time) has contaminated all storage equipment, meaning that fresh water purchased was inadvertently stored and used without a full understanding of the risks.

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[14] Natural Resources Commission "*Barwon-Darling WSP Review Final Report"* September 2019

[15] ICAC *"Investigation into complaints of corruption in the management of water in NSW and systemic non-compliance with the Water Management Act 2000"* October 2020

The consequence of having washed water tanks and equipment, but not completely eliminating the bacteria causing the skin disorders was recontamination and repeat infection, ultimately creating a resistance to antibiotics, which in children has now the potential to impact the success of treatment for any infection for the rest of their lives.

"Poor water quality also has economic impacts on affected users, including increased cost and effort to find alternate water supplies."[16]

Where is our river?

The 2016 cease to flow lasted a record 520 days. Previously, "…a spell of at least 80 days…occurred every year since 2013 at Wilcannia."[17] The 2018 cease to flow lasted even longer, with terrible effect.

Council had already been told by the Murray Darling Basin Authority that downstream impacts would not be taken into account as part of the Northern Basin Review.

The Australian National Audit Office had investigated the $78m purchase of 21,900 megalitres of water (plus business readjustment) from Tandou and yet irrigators with high security water licences along the lower Darling had to wait six years for the government to agree to purchase the water from them, which was obviously no longer high security. Even as they waited, crops failed as the water dried up.

Wentworth Shire Council resolved to send one of its Councillors to a stakeholder meeting about floodplain harvesting in Dubbo on 8 October, 2018. The 23 attendees (and 15 staff) were told about Irrigator Behaviour Questionnaires, Gauge Boards, self-reporting, the inadequacy of IQQM models overall and especially in relation to low and cease to flow events and in capturing return flows, rainfall runoff and, most alarmingly, that the cap was not a number, but a definition!

Councillors attended many, many meetings with community, with bureaucrats, with politicians and ecologists trying to understand how the end of the Darling-Baaka river system could possibly be so terribly forgotten and its communities so poorly treated for so very long. Where is our river?

Councillors went looking – by air and by road, at their own cost – for the river and the reason it had failed to provide any sign of the rains we knew had been falling upstream, in the catchment area.

In August 2020, Council resolved to support a project proposal by Slattery+Johnson about floodplain harvesting. The report was presented to Council in November 2020 and the results confirmed what many had been saying for a long time and what some of us had witnessed with our own eyes.

The results were staggering - the report found storage capacity had increased by 142%, since the 1994 Cap on diversions. The Department of Primary Industry and Environment's own figures alarmingly found similar level of increase, by using similar methods.

[16] Natural Resources Commissioner *"Barwon-Darling WSP Review Final Report"* September 2019 pp.92
[17] MDBA *"Observed Flows in the Barwon-Darling 1990-2017: A Hydrologic Investigation"* March 2018, pp.23

The key issue, as outlined by Slattery+Johnson is "..floodplain water harvesting has never been included in Cap reporting in NSW. That is, Cap has never been complied with in respect to floodplain water harvesting."[18]

Cost-shifting water security for human needs

Basic landholder rights and native title rights are not protected. Councils have increasingly had to bear the cost of providing drinking water to ratepayers and communities.

"Graziers have also had to adjust for the loss of the river as a paddock boundary during periods of decreased flows. As they are unable to fence the floodplain, their useable farm area is significantly reduced. One riverside landholder outlined the productive loss of a third of their property (reduction of about 180 square kilometres) due to the Darling River drying out. When access drops, new troughs, pipes and pumps must be installed, water carted and bores sunk to maintain water supply. Stakeholders spoke not only of the mental stress, lost time and increased isolation from the additional work, but of the physical toll of more frequent periods of low flow, "people are being pushed beyond comprehension". They spoke of the sense of hopelessness and inability to see how future generations would be willing to take on farms if access to water continued as it is."[19]

Funding of up to $10 million was allocated in the 2019–20 NSW budget to improve the drinking water quality in towns such as Walgett and Bourke.[20]

Attached is a further submission sent to the NSW Upper House Committee Inquiry into the rationale for and impacts of, new dams and other water infrastructure in NSW. Council resolved to provide potable water to stations and communities even before any guarantee that costs would be addressed by NSW Government.

What about us?

First flush releases began from Lake Wetherell into the Lower Darling on Thursday 26 March 2020, once the block banks upstream had been removed. The total volume of the first flush was 30GL. Estimated travel times were 12 days from Weir 32 to Pooncarie, 3-4 days from Pooncarie to Burtundy weir, 1-2 days from Burtundy to Wentworth – a total of 16-20 days from Lake Wetherell to Wentworth.

Before water had arrived at Lake Wetherell, A B and C class licences and floodplain harvesting extraction was permitted, limiting the full potential of what may well have had lasting positive impact on our dying river, landscape and native fish populations.

The most destructive element which came into play was that 300% carryover allocation was taken before towns had physical access to flowing water, relying on hypersaline, undrinkable water or donated water for drinking, washing and brushing their teeth (it would be 500% under the floodplain harvesting regulations).

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[18] Slattery+Johnson *"Floodplain water harvesting in the Northern New South Wales Murray-Darling Basin"* February 2021

[19] Natural Resources Commissioner *"Barwon-Darling WSP Review Final Report"* September 2019 pp.93

[20] ibid, pp.96

ICAC has accurately described the outcome of NSW Government systematically favouring upstream irrigators, in a "misguided effort to redress a perceived imbalance caused by the Basin Plan's prioritisation of the environment's needs" as having had "a detrimental effect on the public's confidence in the ecologically sustainable, equitable, transparent and efficient management of the water sources of the state and in the integrity and good repute of public administration, more generally"[21].

For these reasons, Council is of the firm belief that Floodplain water harvesting has exceeded legislated Cap on diversions, permits unapproved structures to impede natural water flow into creeks, tributaries and rivers and has been permitted in contravention of the Water Act (Cth) and Water Management Act (NSW).

The effect has been to severely decimate native fish populations and with that, the amenity and significant share of the estimated $12bn basin wide recreational fishing and related tourism industry, diminish the once lucrative and blossoming irrigation industry along the lower Darling-Baaka, reduce standard of living in our small township of Pooncarie, which businesses will be unable to apply for the recent business grants for covid affected businesses, due to the 2019 economic downturn, meaning business income will not meet the current stated requirements for small businesses.

Council suggests that unless and until the health of the end of the entire river system is prioritized in real terms and there can be a safeguard embedded which turns off the ability to take water upstream until human needs and those of the environment downstream are met, there must be **NO** floodplain harvesting.

Council also contends that any water access licences which may eventually be legislated must **NOT** allow trading, nor must any such licences be compensable. Water flowing across floodplains is geographically unique. Those who have been taking floodwater have been doing so for free for so long, to our detriment, they must not be given further economic benefit, even as we continue to lose out financially.

Council can see no reason to provide another opportunity for the river to owe irrigators, so any increase of entitlement (especially 500 or 600%, as proposed in the Gwydir) above 1 unit must **NOT** be permitted.

Council has seen and heard the impact on the community, on businesses, on farmers and stood with locals at Menindee to witness the largest mass fish kills to occur ever. Council has borne the impact of rapidly drying river source and scrambled to provide water to our ratepayers. Council continues to lament the dry (once) Great Darling Anabranch and tried everything in its power to effect change to restore equity in water management.

If you have any queries in relation to any of the content, or any further questions, please do not hesitate to contact General Manager, Ken Ross.

[21] Sydney Morning Herald *"Premier must adopt ICAC plan to clean up Murray-Darling water rights"* December 20, 2020.

REPORT TO: **The NSW Upper House Committee Inquiry for, and impacts of, new dams and other water infrastructure in NSW.**

Water Deliveries

In 2015 Wentworth Shire Council commenced the installation of a ground water bore in Pooncarie in response to drought conditions. A number of businesses and residents on properties around Pooncarie who did not have access to treated water and relied on the Darling River or their rainwater tanks for their water reported drastically depleted supplies along with extremely poor quality making the water unfit for human consumption.

In response, the NSW Government approved funding for Council to assist with the bore installation and provide water deliveries to the businesses and residents in the area.

The cost of delivery of water for August 2015 to March 2016 was $69,754.88 (GST exclusive), and was fully subsidised by the NSW Government. A total of 2,217,388 litres of water was delivered to businesses and residents in the area.

In July 2018 100% of New South Wales was declared in drought once again. Wentworth Shire Council made the decision to provide potable water and cartage to drought affected households that did not have access to useable water. Water delivery commenced in August 2018.

In January 2019, Council were advised by the NSW Government that financial assistance would be provided to Council to maintain essential supplies of potable water to the residents of the Pooncarie and Lower Darling Area. Further funding was forthcoming with the final total funding of $240,000.00, with Council contributing $3.80 per kilolitre for the period of August 2018 to June 2019, and from July 2019 to March 2020 Council were required to contribute $1.90 per kilolitre of the cost incurred.

The final water delivery took place on May 28 2020.

The NSW Government financial assistance of $240,000.00 was totally expended by the end of March 2020. Water deliveries from 31 March 2020 to 28 May 2020 were continued and paid for by Council. Water delivered for the period August 2018 to March 30 2020 was 8,516,850 litres, and March 31 to May 28 2020 472,106 litres making a total of 8,988,956 litres of potable water delivered.

Summary – Pooncarie Bore Installation and Water Delivery 2016

As stated above, 2015 saw drought conditions in the Wentworth Shire. Council commenced the installation of a ground bore in Pooncarie and the carting of potable water to businesses and residents with the support of the NSW Government.

Council estimated the cost to be $466,445.20. NSW Government covered $319,031.39 of that cost – leaving Council to cover $147,413.81. (see summary following).

PROJECT / WORK	DESCRIPTION	COMMITTED COSTS	COST TO DATE 16/9/2016	RECOVERED FROM NSW GOVERNMENT
Darling River	Water Carted - Town	$47,989.48	$55,631.00	$47,989.48
Darling River	Water Rural - Rural	$21,765.40	$26,527.58	$21,765.40
Darling River/ Bore water	Water Sampling	$784.72	$392.36	$392.36
TOTALS		**$70,539.60**	**$82,550.94**	**$70,147.24**
BORE, WATER STORAGE & ELECTRICAL UPGRADE				
Pooncarie Bore	Establishment	$63,402.28	$63,402.28	$63,402.28
Extra Water Store Pooncarie Reservoir	Pooncarie Water storage reservoir	$65,423.15	$65,423.15	$65,423.15
Water Treatment Plant / water storage reservoir	Electrical upgrade	$217,906.74	$68,379.00	$90,058.72
TOTALS		**$346,732.17**	**$197,204.43**	**$218,884.15**
STANDPIPES				
Standpipe	Wentworth	$26,416.00	$29,748.74	$15,000.00
	Pooncarie	$9,880.79	$19,817.05	$15,000.00
TOTALS		**$36,296.79**	**$49,565.79**	**$30,000.00**

Summary of Pooncarie Bore Installation 2016:

Total Cost of the Project: **$466,445.20.**

Recovered from NSW Government: **$319,031.39.**

Cost to Council: **$147,413.81.**

Summary Water Carting August 2015 – March 2016

Cost to Council	Govt. Financial Assistance	Litres of Water Carted
Nil	$69,754.88	2,217.388 litres

Summary – Further Drought Emergency works – 2019 – 2020.

Wentworth Shire Council applied to the NSW Government for drought emergency funding to install further bores to supply water to the Pooncarie region, together with additionally required upgrade works at the water treatment plant and river pump station. A scope was formulated with an estimated cost of $1,922,000.00. (Refer to Attachment 1)

The Department of Industry revised the scope and approved a cost of $878,000.00 – comprising 75% from "Restart NSW" - $658,500.00 and Wentworth Shire Council contributing 25% - $219,500.00. (Refer to attachment 2)

To date actual spend is $934,387.26, with Wentworth Shire Council's contribution growing to $332,254.27. Claim to Government to date - $654,128.63 – with a further $4,371.37 remaining to be claimed. (Refer to attachments 3 & 4)

Works still be completed under the approved revised scope of works:

- licensing of bores - $30,000.00.

Outstanding items identified in original scope of works still to be completed:

- Construction of a new raw water pump station - $732,000.00
- Replace of the reservoir deck - $428,000.00
- Water Treatment Plant - $154,000.00

Summary Water Carting August 2018 – May 2020

Time Frame	Cost to Council	Government Financial Assistance	Litres of Water Carted
August 2018 to 30 March 2020	$21,561.32	$240,000.00	8,516,850 litres
March 31 2020 to May 28 2020	$20,174.39	Nil	472,106 litres

Attachment 1

Pooncarie Water Supply - Emergency Capital Works - Scope of Works and Cost Estimates

Priority Works	Asset	Work Item	Estimated Cost (excl. GST)
1	**Ground Water Bores**		
		Emergency Raw Water Storage Tanks	$30,000
		Emergency Lift Pump and pipework	$15,000
		Water security for township - install additional 4 no. ground water bores for raw water supply	$400,000
		Monitoring of water levels and quality of water in current & future bores (5 total)	$50,000
		Emergency bores telemetry and linking to SCADA for monitoring	$25,000
		License current bore from "emergency bore" to licensed bore with allocation of water right	$3,000
		Implement filtering system and further settling storage for current bore	$25,000
		Contingency	$60,000
		Sub Total	$608,000
2	**Storage Reservoirs**		
		Replacement of elevated platforms to comply with current design standards and WH&S standards	$200,000
		Repainting elevated platforms & stands	$30,000
		Replacement of filtered and raw water storage tanks	$40,000
		Upgrading of water transfer system – pump upgrade	$20,000
		Telemetry and level sensors for storage tanks, linked to SCADA	$10,000
		Storm water drainage and sealing of roadway around standpipe	$30,000
		Changes to system to flush and clean storage tanks, to include scouring points for waste water product	$5,000
		Structural investigation of filtered water elevated stands/ platform and foundations (due to leaking tank)	$3,000
		Monitoring of chlorine residue levels, mixers in storage tanks to circulate water	$50,000
		Contingency	$40,000
		Sub Total	$428,000
3	**Water Treatment Plant**		
		Protection of assets - shed extension to cover filters (carport style)	$30,000
		Refurbishment of lagoons, lining of lagoons with HDPE liner	$80,000
		Improve internet links – NBN upgrade- improve remote SCADA visibility	$15,000
		Improve telemetry links to raw water pump station and reservoir storage	$5,000
		Upgrade chlorine contact arrangement by modifying reservoir inlet/ outlet pipework, to provide adequate chlorine contact time for primary disinfection	$10,000
		Contingency	$14,000
		Sub Total	$154,000
4	**Raw Water Pump Station**		
		Replacement of pump skids into river – floating pontoon design	$500,000
		Replacement of raw water pumps- duty/standby	$20,000
		Replacement of electrical cabinets and electrical equipment	$60,000
		Demolition of previous wet well structure – WH&S related	$25,000
		Upgrading of pre dose chlorine dosing system, to include telemetry linking to SCADA	$20,000
		Update filter system to automated cleaning of filter screens (2 filters)	$40,000
		Contingency	$67,000
		Sub Total	$732,000
		WSC contribution @ 25%	$480,500
		RNSW contribution @ 75%	$1,441,500
		Total (excl. GST)	$1,922,000

Attachment 2

Pooncarie Water Supply - Emergency Capital Works - Scope of Works and Cost Estimates

Priority Works	Asset	Work Item	WSC Estimated Cost	Department of Planning, Industry & Environment granted funding
1	Ground Water Bores		(excl. GST)	
		Emergency Raw Water Storage Tanks	$30,000	
		Emergency Lift Pump and pipework	$15,000	
		Water security for township - install additional 4 no. ground water bores for raw water supply	$400,000	reduced scope - 2 bores
		Monitoring of water levels and quality of water in current & future bores (5 total)	$50,000	
		Emergency bores telemetry and linking to SCADA for monitoring	$25,000	
		License current bore from "emergency bore" to licensed bore with allocation of water right	$3,000	
		Implement filtering system and further settling storage for current bore	$25,000	
		Contingency	$60,000	
		Sub Total	$608,000	$450,000.00
2	Storage Reservoirs			
		Replacement of elevated platforms to comply with current design standards and WH&S standards	$200,000	
		Repainting elevated platforms & stands	$30,000	
		Replacement of filtered and raw water storage tanks	$40,000	
		Upgrading of water transfer system – pump upgrade	$20,000	
		Telemetry and level sensors for storage tanks, linked to SCADA	$10,000	
		Storm water drainage and sealing of roadway around standpipe	$30,000	
		Changes to system to flush and clean storage tanks, to include scouring points for waste water product	$5,000	
		Structural investigation of filtered water elevated stands/ platform and foundations (due to leaking tank)	$3,000	
		Monitoring of chlorine residue levels, mixers in storage tanks to circulate water	$50,000	
		Contingency	$40,000	
		Sub Total	$428,000	$428,000
3	Water Treatment Plant			
		Protection of assets - shed extension to cover filters (carport style)	$30,000	
		Refurbishment of lagoons, lining of lagoons with HDPE liner	$80,000	
		Improve internet links – NBN upgrade- improve remote SCADA visibility	$15,000	
		Improve telemetry links to raw water pump station and reservoir storage	$5,000	
		Upgrade chlorine contact arrangement by modifying reservoir inlet/ outlet pipework, to provide adequate chlorine contact time for primary disinfection	$10,000	
		Contingency	$14,000	
		Sub Total	$154,000	not eligible for funding
4	Raw Water Pump Station			
		Replacement of pump skids into river – floating pontoon design	$500,000	
		Replacement of raw water pumps- duty/standby	$20,000	
		Replacement of electrical cabinets and electrical equipment	$60,000	
		Demolition of previous wet well structure – WH&S related	$25,000	
		Upgrading of pre dose chlorine dosing system, to include telemetry linking to SCADA	$20,000	
		Update filter system to automated cleaning of filter screens (2 filters)	$40,000	
		Contingency	$67,000	
		Sub Total	$732,000	not eligible for funding
		WSC contribution @ 25%	$480,500	$219,500.00
		RNSW contribution @ 75%	$1,441,500	$658,500.00
		Total (excl. GST)	$1,922,000	$878,000.00

Attachment 3

Asset	Work Item	Value of completed works - 1/6/20	WSC Estimated Cost to complete	Value of completed Works 10/12/2020
		(excl. GST)	(excl. GST)	
Raw water pump station bore #1				
	RWPS Bore #1 Bore drilling, sampling, construction, advice	$21,762.00		
	RWPS site 2 x 50kl settling tanks	$17,876.00		
	Design, drawings, advice PLC programming - 100 hours	$15,000.00		
	PLC HMI development works, telemetry equipment	$32,910.00		
	Aboriginal heritage AHIMS search	$60.00		
	Dry Hire of Backhoe for 12 hours	$2,535.00		
	Plumbing works, fittings, pipework, labour, travel, works from 24/9/2019 to 16/10/2019	$47,668.90		
	Plumbing works, fittings, pipework, labour, travel, works from works from 13/11/19 to 4/12/19	$23,444.76		
	Electrical works, fittings, conduits,wiring , labour, travel, works from 24/9/2019 to 15/11/2019	$66,835.65		
	Crane hire - 25 tonne with dogman to manuevure tanks into positions 2/10/2019	$3,080.00		
	Purchasing of bore pumps, transfer pumps - RWPS site	$10,482.00		$3,818.19
	Test Bag inflatable (to get bore casing out of bore)	$214.31		
	Supply & install 1 x bore shed	$14,953.51		
	Digital dosing pumps (Iwaki) chlroine dosing system	$3,733.69		
	Sodium Hypochlorite shuttles 1000L	$1,796.80		
	Crane with winch setup for maintenance on pump	$1,739.10		
	Emergency bores monitoring testing and commisioning for items electrically, telemetry, plumbing and linking to SCADA	$15,000.00		
	Design of system/ automation linking bores to existing storage systems (link all system to SCADA)	$30,000.00		
	Hydrolgist - multi stage pump testing / CRT Testing/ Recovery	$35,000.00		
	Modifications to pipework, sensors, telemtry, WSC personal hrs to conduct pump tests	$5,000.00		
	Hydrologist - Ground water managemnt plan	$17,659.20		$18,959.20
	Padlocks for doors, roller doors	$1,736.36		
	As constructed drawings of whole new system		$2,500.00	
	License current bore from "emergency bore" to licensed bore with allocation of Water Access License (WAL)			$2,500.00
	Updating of filtering system - automated		$25,000.00	
	Extending perimeter fencing		$10,000.00	
	Building to house required switchboards, VSD's		$50,000.00	
	Replacement of electrical cabinets and electrical equipment - (RWPS make system work, without throwing out power supply)		$70,000.00	
	Plumbing work modify pipework, replace valves		$10,000.00	
	Electrical works still to be conducted as of 21/5/2020		$10,000.00	
	Fire Extinguishers for all sites			$1,314.40
	Hard stand area within compound, around shed for vehicle and forklift access		$5,000.00	
	Sub Total	$368,487.28	$182,500.00	$26,591.79
Reservoir Bore #2				
	RWPS site 6 x 50kl settling tanks & storage tanks	$39,488.00		
	Reservoir Bore #2 Bore drilling, sampling, construction, advice	$17,006.50		
	Design, drawings, advice PLC programming - 100 hours	$15,000.00		
	Switchboard -MSB & MCC for Reservoir site	$55,000.00		
	PLC HMI development works, telemetry equipment	$26,660.00		
	Sodium Hypochlorite shuttles 1000L	$1,796.80		
	Plumbing works, fittings, pipework, labour, travel, works from works from 22/10/19 to 12/11/2019	$57,081.07		
	Plumbing works, fittings, pipework, labour, travel, works from works from 17/12/2019 t 24/1/2020	$9,233.68		
	Electrical works, fittings, conduits,wiring , labour, travel, works from 24/9/2019 to 20/1/2020	$80,155.10		
	Crane hire - 25 tonne with dogman to manuevure tanks into positions 3/10/2019	$2,630.00		
	Purchasing of bore pumps, transfer pumps - Reservoir site	$16,424.00		
	Supply & install 1 x bore shed 1 x transfer pump shed	$22,727.27		
	Digital dosing pumps (Iwaki) chlroine dosing system	$3,733.69		
	Steel pipe, capping, plate for bollards	$2,057.87		
	Crane with winch setup for maintenance on pump	$1,158.00		
	Dry Hire of Backhoe for 12 hours	$2,535.00		
	Supply of 2 bore pumps, (one replacement for broken 1, 1 spare) inlcudes controller, and all fittings to install onsite	$11,830.45		
	Fire extinguishers for all bore sheds, transfer shed	$1,314.40		
	Padlocks for doors, roller doors	$1,736.36		
	Hydrolgist - multi stage pump testing / CRT Testing/ Recovery	$35,000.00		$13,532.48
	Emergency bores telemetry and linking to SCADA for monitoring testing and commisioning		$2,500.00	
	License current bore from "emergency bore" to licensed bore with allocation of Water Access License (WAL)			$2,500.00
	As constructed drawings of whole new system		$2,500.00	
	Extending perimeter fencing		$40,000.00	
	Hard stand area within compound, around shed for vehicle and forklift access		$20,000.00	
	Hydrolgist - multi stage pump testing		$5,000.00	
	Filtering system - automated		$70,000.00	
	modifications to pipework, sensors, telemtry, WSC personal hrs to conduct pump tests			
	Sub Total	$402,568.19	$140,000.00	$16,032.48
Racecourse bore #3				
	Racecourse Bore #3 Bore drilling, sampling, construction, advice	$10,552.50		
	Supply & install 1 x bore shed 1	$14,953.51		
	Supply of Racecourse bore pump,	$4,890.00		
	Supply of 2 x 50kl poly tanks	$8,926.80		
	Hydrolgist - multi stage pump testing	$6,856.00		
	Crane with winch setup for maintenance on pump	$1,034.54		
	8 staton irrigation controller - Replace broken one from CRT testing	$409.90		
	Emergency bores telemetry and linking to SCADA for monitoring testing and commisioning	$2,000.00		
	Modifications to pipework, sensors, telemtry, WSC personal hrs to conduct pump tests	$4,500.00		
	Design of system/ automation linking bores to existing storage systems (link all system to Wide area SCADA)	$2,500.00	$2,000.00	
	License current bore from "emergency bore" to licensed bore with allocation of Water Access License (WAL)			$2,500.00
	As constructed drawings of whole new system		$2,500.00	
	Sub Total	$56,023.25	$4,500.00	$2,500.00
Stock route dam bore #4				
	Stock route dam Bore #4 Bore drilling, sampling, construction, advice	$6,192.50		
	Sub Total	$6,192.50	$0.00	$0.00
Storage Reservoirs				
	Replacement of 2 x 22700 litre storage tanks - filtered	$8,624.00		
	Purchase and install of upgraded water transfer pump	$5,503.00		
	Changes made to flushing and cleaning pipework to raw water tanks	$1,080.00		
	Structural investigation of filtered water elevated stands/ platform and foundations	$2,200.00		
	Design of elevated platforms to comply with current design standards and WH&S standards	$17,990.00		
	Telemetry and level sensors for storage tanks, linked to SCADA	$6,250.00		
	WSC project management costs - Staff wages, ute km's, phone, computer	$59,469.04		
	Construction of elevated platforms to comply with current design standards and WH&S standards		$220,000.00	
	Upgrading of water transfer system		$25,000.00	
	Repainting elevated stands		$30,000.00	
	Replacement raw water storage tanks x 3 including crane hire		$25,000.00	
	Changes to pipework system to in & out system		$25,000.00	
	Storm water drainage and sealing of roadway around standpipe		$30,000.00	
	Monitoring of chlorine residue levels, mixers in storage tanks to circulate water		$50,000.00	
	License current bore from "emergency bore" to licensed bore with allocation of Water Access License (WAL)			$2,500.00
	Sub Total	$101,116.04	$405,000.00	$2,500.00
	Total (excl. GST)	$934,387.26	$732,000.00	$47,624.27

Attachment 4

DPI Water Cost Recovery - Pooncarie Drought Emergency Works

Pooncarie Bores - Lower Darling River Water Crisis 2019

PROJECT / WORK	DESCRIPTION	COMMITTED COSTS	COST TO DATE - WSC 1/6/2020	RECOVERABLE COSTS % DPIE claimed 16/6/2020	RECOVERABLE COSTS % WSC	RECOVERABLE COSTS % DPIE claimable 10/12/2020	Cost to date - WSC 10/12/2020
DPI Water funding - SSWF - Critical Drought Initiative 2		All amounts are GST exclusive					
Pooncarie drought emergency water supply works	Original application	$1,922,000.00					
	DPIE revised scope & approved funding whole project	$878,000.00				$878,000.00	
	WSC contribution @ 25%	$219,500.00				$219,500.00	
	RNSW contribution @ 75%	$658,500.00				$658,500.00	
RWPS Bore #1	Approved funding	$225,000.00	$368,487.28	$168,750.00	$56,250.00		$26,591.79
Reservoir Bore #2	Approved funding	$225,000.00	$402,568.19	$168,750.00	$56,250.00		$16,032.48
Racecourse Bore #3	Not eligible to be funded	$0.00	$56,023.25	$0.00	$0.00	$0.00	$2,500.00
Stock route bore #4	Not eligible to be funded	$0.00	$6,192.50	$0.00	$0.00	$0.00	$2,500.00
Storage Reservoirs	Approved funding	$428,000.00	$101,116.04	$321,000.00	$107,000.00		0
	Totals	**$878,000.00**	**$934,387.26**	**$658,500.00**	**$219,500.00**	**$4,371.37**	$47,624.27

	WSC eligible cost to date		$872,171.51	$654,128.63	$218,042.88	$0.00	

Total expenditure to date	$982,011.53
Council share to date	$327,882.90
Government share to date	$654,128.63
requested payment claim final	$4,371.37

Wentworth Shire Council
26-28 Adelaide Street WENTWORTH NSW 2648
PO Box 81 WENTWORTH NSW 2648

Our Reference: DOC/20/3089
Your Reference:
Prepared By: EA General Manager
Phone: 03 5027 5027
Date: 14 February 2020

The Hon. Melinda Pavey MP
Minister for Water, Property and Housing
GPO Box 4558
SYDNEY GPO PRIVATE BOXES NSW 2001

Email: office@pavey.minister.nsw.gov.au

Dear Minister Pavey

HEALTH OF OUR RIVER SYSTEM – CONNECTIVITY TO THE MURRY RIVER

As a lead into the issues I wish to raise, I thought it was worth sharing my support and agreement for the following statements you have made to the media. These statements represent strong character and leadership to ensure the whole river benefits from the inflows into the basin.

"We want it to get to Menindee, we want it to get all the way to the South Australian border. We need a big first flush of the river system. This drought has been unprecedented."
"We have embargoed farmers from pumping water in the northern basin to supply critical human needs, as well as providing replenishment flows for remnant pools in riverbeds."
"If we get to the point where we're satisfied… that we've hit those trigger points, the water can get down the system to the South Australian border in a healthy way, then we will look at lifting (the restrictions)."

Unfortunately, to hear you have approved floodplain harvesting in an area with temporary water restriction in place completely contradicts all of your statements above. This is where I must share my disappointment with your action on this.

The Lower Darling is in a disastrous state. The only thing that can revitalise the river, is water. The current assessment by WaterNSW is that between 10 and 30 gigalitres may reach Menindee toward the end of March. It is vitally important that the embargoes remain in place until the health of the Lower Darling can be assured. This can only happen through connectivity of the entire Darling River system.

Minister Pavey, the pumping embargo due to expire on 17 February 2020 must be extended. Any future floodplain harvesting should only occur once the trigger points, as mentioned in your statement above, have been hit. This is a must to be able to achieve your aims for the health of the river and the welfare of our communities. Surely, suppling water for critical human needs must come before everything else.

Should you require any clarification of the content of this letter please do not hesitate to contact the Office of the General Manager on

Yours sincerely

MELISA HEDERICS
MAYOR