

**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
<b>TOTALS</b>		<b>\$70,539.60</b>	<b>\$82,550.94</b>	<b>\$70,147.24</b>
<b>BORE, WATER STORAGE &amp; ELECTRICAL UPGRADE</b>				
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
<b>TOTALS</b>		<b>\$346,732.17</b>	<b>\$197,204.43</b>	<b>\$218,884.15</b>
<b>STANDPIPES</b>				
Standpipe	Wentworth	\$26,416.00	\$29,748.74	\$15,000.00
	Pooncarie	\$9,880.79	\$19,817.05	\$15,000.00
<b>TOTALS</b>		<b>\$36,296.79</b>	<b>\$49,565.79</b>	<b>\$30,000.00</b>

**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 to 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

Pooncarie Water Supply - Emergency Capital Works - Scope of Works and Cost Estimates				
Priority Works	Asset	Work Item	Estimated Cost	
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	
		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		

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		

Asset	Work Item	Value of completed works - 1/6/20 (excl. GST)	WSC Estimated Cost to complete (excl. GST)	Value of completed Works 10/12/2020
<b>Raw water pump station bore #1</b>				
	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 I/O 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 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 manoeuvre 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 (waki) chlorine 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 commissioning 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		
	Hydrologist - multi stage pump testing / CRT Testing/ Recovery	\$35,000.00		
	Modifications to pipework, sensors, telemetry, WSC personal hrs to conduct pump tests	\$5,000.00		
	Hydrologist - Ground water management 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	\$26,991.79
<b>Reservoir Bore #2</b>				
	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 I/O development works, telemetry equipment	\$26,660.00		
	Sodium Hypochlorite shuttles 1000L	\$1,796.80		
	Plumbing works, fittings, pipework, labour, travel, works from 22/10/19 to 12/11/2019	\$57,081.07		
	Plumbing works, fittings, pipework, labour, travel, works from 17/12/2019 to 24/1/2020	\$9,233.68		
	Electrical works, fittings, conduits, wiring, labour, travel, works from 24/9/2019 to 20/1/2020	\$60,155.10		
	Crane hire - 25 tonne with dogman to manoeuvre 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 (waki) chlorine 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) includes 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		
	Hydrologist - multi stage pump testing / CRT Testing/ Recovery	\$35,000.00		\$13,532.48
	Emergency bores telemetry and linking to SCADA for monitoring testing and commissioning		\$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	
	Hydrologist - multi stage pump testing		\$5,000.00	
	Filtering system - automated		\$70,000.00	
	modifications to pipework, sensors, telemetry, WSC personal hrs to conduct pump tests			
	Sub Total	\$402,568.19	\$140,000.00	\$16,032.48
<b>Racecourse bore #3</b>				
	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	\$8,326.80		
	Hydrologist - multi stage pump testing	\$6,856.00		
	Crane with winch setup for maintenance on pump	\$1,034.54		
	8 station irrigation controller - Replace broken one from CRT testing	\$409.90		
	Emergency bores telemetry and linking to SCADA for monitoring testing and commissioning	\$2,000.00		
	Modifications to pipework, sensors, telemetry, 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
<b>Stock route dam bore #4</b>				
	Stock route dam Bore #4 Bore drilling, sampling, construction, advice	\$6,192.50		
	Sub Total	\$6,192.50	\$0.00	\$0.00
<b>Storage Reservoirs</b>				
	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
<b>DPI Water funding - SSWF - Critical Drought Initiative 2</b>		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			
	WSC contribution @ 25%	\$219,500.00			
	RNSW contribution @ 75%	\$658,500.00			
RWPS Bore #1	Approved funding	\$225,000.00	\$368,487.28	\$168,750.00	\$56,250.00
Reservoir Bore #2	Approved funding	\$225,000.00	\$402,568.19	\$168,750.00	\$56,250.00
Racecourse Bore #3	Not eligible to be funded	\$0.00	\$56,023.25	\$0.00	\$0.00
Stock route bore #4	Not eligible to be funded	\$0.00	\$6,192.50	\$0.00	\$0.00
Storage Reservoirs	Approved funding	\$428,000.00	\$101,116.04	\$321,000.00	\$107,000.00
	<b>Totals</b>	<b>\$878,000.00</b>	<b>\$934,387.26</b>	<b>\$658,500.00</b>	<b>\$219,500.00</b>

RECOVERABLE COSTS % DPIE claimable 10/12/2020	Cost to date - WSC 10/12/2020
\$878,000.00	
\$219,500.00	
\$658,500.00	
	\$26,591.79
	\$16,032.48
\$0.00	\$2,500.00
\$0.00	\$2,500.00
	0
\$4,371.37	\$47,624.27

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