

Barossa Infrastructure Ltd Recycled Water Irrigation Scheme - Gomersal 2025/2026 Report

Barossa Infrastructure Ltd (BIL) supplies water to viticulturalists in the Barossa Valley for irrigation.

BIL's primary water source is SA Water's Warren Reservoir, which is supplemented with River Murray water via SA Water's Mannum-Adelaide pipeline. In this way, raw water is transported to BIL's infrastructure at Fromm Square, Williamstown. At SA Water's discretion, SA Water can also choose to transport BIL filtered and chloraminated water via the Swan Reach-Stockwell pipeline, connecting to BIL at the same Williamstown location. Refer Figure 1.

BIL also receives treated CWMS water from Barossa Council, which is blended with the abovementioned water and supplied to a limited number of customers from BIL's Gomersal Rd pipeline. Refer to the red circled area in Figure 1.

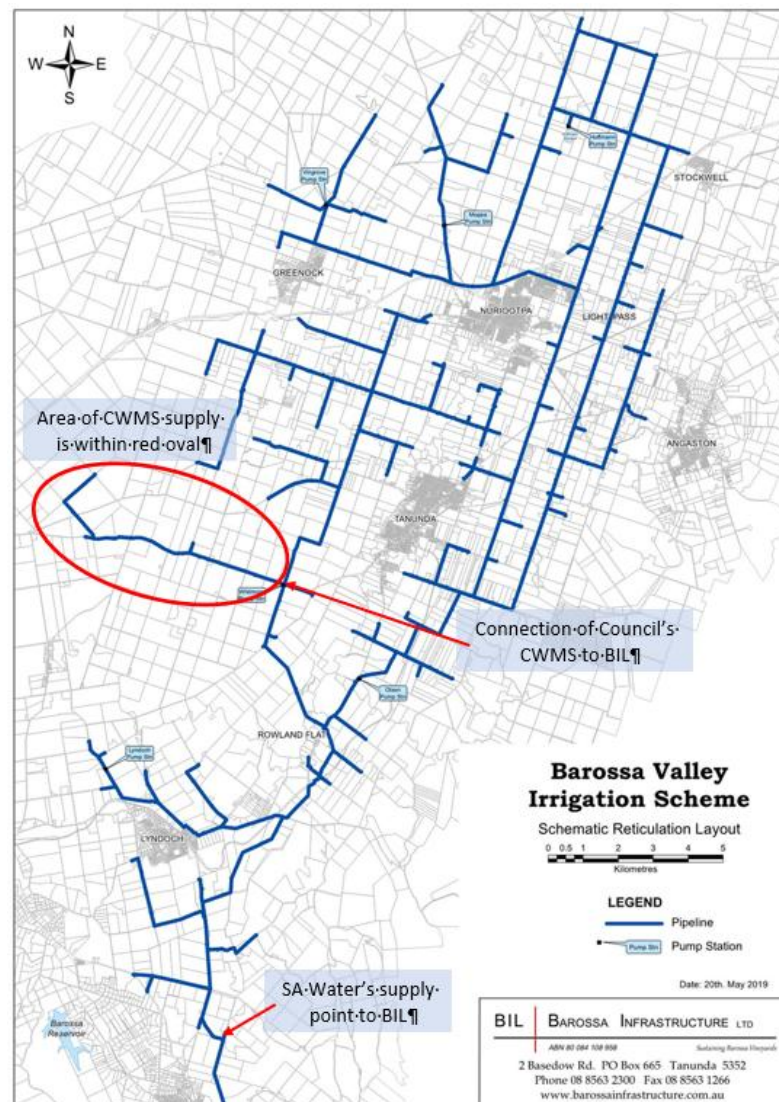


Figure 1. BIL's pipeline network, showing location of source waters and area of CWMS supply

In 2025/26, CWMS water represented 2.6% of BIL's total water supply across the whole scheme, and 15.6% of the Gomersal Rd pipeline supply. The supplied CWMS water is blended with water transported by SA Water to BIL via Fromm Sq. The blend ratio is varied throughout the year to achieve the flow rate require by the customers.

See the following table for a monthly breakdown.

Table 1 - Monthly Volume of Source Water into BIL's Gomersal Rd Pipeline					
	CWMS Source		Fromm Sq Source		Total
	(ML)	(%)	(ML)	(%)	(ML)
Jul-25	32.1	94%	2.0	6%	34.1
Aug-25	31	46%	36.4	54%	67.4
Sep-25	28.6	9%	274.6	91%	303.2
Oct-25	30.3	30%	69.8	70%	100.1
Nov-25	15.4	26%	44.6	74%	60.0
Dec-25	30.9	12%	231.1	88%	262.0
Jan-26	29.8	7%	391.8	93%	421.6
Feb-26	21.6	6%	318.0	94%	339.6
Mar-26	1.7	4%	46.2	96%	47.9
Apr-26	3.8	16%	20.3	84%	24.1
May-26	19.3	61%	12.2	39%	31.5
Jun-26	32.4	40%	48.3	60%	80.7
TOTAL VOLUME	276.9	15.6%	1495.2	84.4%	1772.1

Samples of the CWMS supply to BIL are taken by Council just upstream of the interface point. These samples are of only CWMS water. Table 2 contains the test results from Council's samples.

Table 2 - Barossa Council Sampling Analysis Results
Sampled at the interface point, sampling only undiluted CWMS water.

Date	Ammonia as N	BOD	Ca	COD	Conductivity	E. coli	Grease & Oil	Mg	N+N as N	Nitrate as N	Nitrite as N	pH	Phos. Total	Sodium	Sodium AR	Suspended S	Temp for pH	TKN as N	Total DS	Free Chlorine	Total Chlorine
	mg/L	mg/L	mg/L	mg/L	uScm	MPN/100mL	mg/L	mg/L	mg/L	mg/L	mg/L	Units	mg/L	mg/L	mg/L	mg/L	Deg C	mg/L	mg/L	mg/L	mg/L
16/07/2025	18.3	18	26.4	93	1010	0	7	14.2	6.52	5.45	1.07	7.2	10.2	114	4.45	13	18.5	26.9	560		
12/08/2025	25.6	21	21.6	113	1060	0	2	12.8	4.53	2.1	2.43	7.3	8.85	108	4.55	12	18.7	30.7	588		
16/09/2025	19.1	28	23.1	134	1000	13	<1	14.1	9.64	3.89	5.75	7	12	126	5.1	36	19	29.7	555		
14/10/2025	23.4	9	21.8	106	1050	0	2	14.4	3.23	3.17	<0.06	7.4	10.6	114	4.65	21	17.3	33	583		
14/11/2025																					
16/12/2025	11.4	10	33.3	118	1130	0	4	20.5	<0.06	<0.06	<0.06	7.4	10.5	140	4.71	26	19.1	23.1	627		
13/01/2026	17.6	12	30.3	139	1200	8	9	19.7	<0.06	<0.06	<0.06	7.5	15.8	149	5.18	16	18.2	27.2	666		
10/02/2026	19.5	16	29.4	128	1090	38	3	15	<0.06	<0.06	<0.06	7.6	12.9	120	4.49	35	19.5	42.1	605		
12/03/2026																					
14/04/2026																					
12/05/2026	22.6	3	24	47	877	0	<1	11.4	7.45	5.76	1.69	7.1	10.1	102	4.29	14	17.8	13.6	486		
	Aluminium - Total	Ammonia as N	Arsenic - Total	Beryllium - Total	Biochemical Oxygen Demand	Boron - Soluble	Cadmium - Total	Calcium	Chemical Oxygen Demand	Chromium - Total	Cobalt - Total	Conductivity	Copper - Total	E.coli	Fluoride	Grease and Oil	Iron - Total	Lead - Total	Lithium - Total	Magnesium	Manganese - Total
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	MPN/100m	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
From	0.247	18.3	0.00064	<0.0002	18	0.098	<0.0001	26.4	93	0.0008	0.0003	1010	0.0113	0		7	0.1616	0.0016	0.0067	14.2	0.0328
Date	Mercury - Total	Molybdenum - Total	Nickel - Total	Nitrate + Nitrite as N	Nitrate as Nitrogen	Nitrite as Nitrogen	pH	Phosphorus - Total	Selenium - Total	Sodium	Sodium Adsorption Ratio - Calculation	Suspended Solids	Temperature at which pH is measured	TKN as Nitrogen	Total Dissolved Solids (by EC)	Uranium - Total	Vanadium - Total	Zinc - Total			
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pH units	mg/L	mg/L	mg/L		mg/L	degC	mg/L	mg/L	mg/L	mg/L	mg/L			
16/07/2025	<0.00003	0.0006	0.0021	6.52	5.45	1.07	7.2	10.2	0.0002	114	4.45	13	18.5	26.9	560	0.0001	0.0004	0.0613			

Table 3 attempts to calculate the monthly weighted blended values of the four key parameters listed in BIL's SA Health approval.

Table 3 - Calculation of Weighted Average Blended Parameters, Approximate														
Month	Volume		BOD			Suspended Solids			E. coli			Total Chlorine		
			Criteria ≤20mg/L			Criteria ≤30mg/L			Criteria 100/100mL			Criteria >1mg/L		
	CWMS	Fromm Sq	CWMS	Fromm Sq	Weighted Average	CWMS	Fromm Sq	Weighted Average	CWMS	Fromm Sq	Weighted Average	CWMS	Fromm Sq*	Weighted Average
	ML	ML	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	cfu/100mL	cfu/100mL	cfu/100mL	mg/L	mg/L	mg/L
Jul-25	32.1	2.0	18	2	17	13	1	12	0	0	0	0	4.6	0.3
Aug-25	31	36.4	21	2	11	12	1	6	0	0	0	0	4.4	2.4
Sep-25	28.6	274.6	28	2	4	36	1	4	13	0	1	0	4.2	3.8
Oct-25	30.3	69.8	9	2	4	21	1	7	0	0	0	0	4.1	2.9
Nov-25	15.4	44.6	10	2	4	24	3	8	0	0	0	0	0	0.0
Dec-25	30.9	231.1	10	2	3	26	6	8	0	0	0	0	0	0.0
Jan-26	29.8	391.8	12	2	3	16	9	9	8	1	1	0	0	0.0
Feb-26	21.6	318.0	16	2	3	35	7	9	38	1	3	0	0	0.0
Mar-26	1.7	46.2	12	2	2	28	5	6	10	1	1	0	0	0.0
Apr-26	3.8	20.3	8	2	3	20	3	6	0	1	1	0	0	0.0
May-26	19.3	12.2	3	2	3	14	3	10	0	1	0	0	0	0.0
Jun-26	32.4	48.3	3	2	2	14	4	8	0	1	1	0	0	0.0
Note: Grey coloured values are estimates based on the sample results before or after it, and therefore the weighted average is approximate only.														
Note: Criteria are from SA Health Approval Number WWI-11052.														
Note: * It is anticipated that all chlorine available at Fromm Sq will have been consumed during transit to the CWMS scheme, and so these values are considered overly optimistic.														

If you have any queries or would like additional information, please contact Simon on 0403 743 199.