MONTHLY REPORTING PERIOD - MAY, 2025

SUMMARY

This document provides a summary of water quantity and quality data collected by BMID in May 2025.

WATER SUPPLY SUMMARY

Water Source	Active / Not Active	Volume (Mega Liters)	Irrigation / Domestic	Comments
Mission Ck.	**Active**	**1,197.97**	**Domestic/Irrig.**	Primary Water supply. Domestic and irrig. demand.
Scotty Creek	**Active**	**26.97**	**Irrig. only**	Scotty Creek source resumed operations in May 2025
Well 3 Cornish	Not Active	0	Irrig. only	Well #3 upgrade underway to provide for irrigation
Well 4	**Active**	**15.63**	**Domestic**	Primary domestic source to Scotty Creek service area
Well 5	**Active**	**109.67**	**Domestic/Irrig**	Well #5 resumed operations in May 2025
Well 6	**Active**	**25.66**	**Irrig. only**	Well # 6 resumed operations in May 2025
May 2025	**Total:**	**1,375.90**		**10 Year Average for May = 1,371.37**

WATER QUALITY SUMMARY

Raw Water Microbiological Summary		**E-Coli**		
Location	# of Samples	Lowest *E.Coli* Reading	Ave. *E.Coli* Reading	Highest *E.Coli* Reading
Mission Creek Intake	4	1	6.25	17
Stevens Reservoir	4	0	1	3
Hadden Reservoir	4	0	0.50	2

Treated Water Microbiological Summary		**Turbidity Summary**		
Location	Low Reading	Average Reading	High Reading	Comments
Mission Creek Raw Water	2.92 NTU	14.04 NTU	56.10 NTU	
Distribution Intake	0.23 NTU	0.44 NTU	1.21 NTU	
Booster # 1 (first customer)	0.40 NTU	0.65 NTU	1.11 NTU	
UV Treatment Plant	0.56 NTU	1.17 NTU	2.22 NTU	Turb. meter error. Required maintenance in May
		UV Treatment Plant		
Plant Flow Volume	In-Spec	Off-Spec	% Off-Spec	Comments
m^3	1,197,950 m^3	18 m^3	0.001%	

WATER QUALITY DISTRIBUTION TESTING

		CARO (third party) Testing	**24**
BMID Population:	30,000	In House Pres./Absence	**9**
Required Minimum # of Tests:	30	Total Tests:	**33**
		Total Positive Tests:	**0**

Documentation and figures are provided on the following pages to support this submission.

1.0 FLOWS - MAY, 2025

Mission Creek provided 87% of the 1,375.90 Mega Liters used in the BMID system in May, with Well #4, Well #5, Well #6 and Scotty Creek supplying the remaining 13%.

Figure 1.1 - Domestic Water System Flow

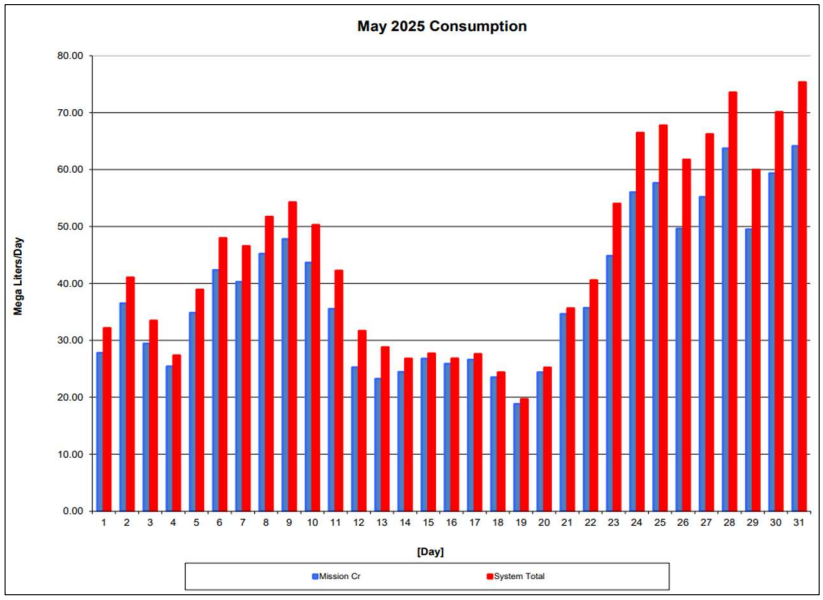


Table 1.2 - May 2025 - Daily Consumption Report

Year	Mission Cr	Well #4	Well #5	Well #6	Scotty Crk	System Total
2025	ML/Day	ML/Day	ML/Day	ML/Day	ML/Day	ML/Day
1-May	27.80	0.98	0.00	3.37	0.00	32.15
2-May	36.49	1.05	0.00	3.49	0.00	41.03
3-May	29.42	1.03	0.00	3.00	0.00	33.45
4-May	25.43	0.90	0.00	1.02	0.00	27.35
5-May	34.83	0.93	2.05	1.11	0.00	38.92
6-May	42.34	0.40	4.72	0.52	0.00	47.98
7-May	40.27	0.00	6.29	0.00	0.00	46.56
8-May	45.21	0.00	6.50	0.00	0.00	51.71
9-May	47.80	0.00	6.46	0.00	0.00	54.26
10-May	43.66	0.00	6.62	0.00	0.00	50.28
11-May	35.53	0.00	6.71	0.00	0.00	42.23
12-May	25.26	0.00	6.39	0.00	0.00	31.66
13-May	23.24	0.23	5.32	0.00	0.00	28.79
14-May	24.44	0.81	1.54	0.00	0.00	26.79
15-May	26.78	0.92	0.00	0.00	0.00	27.71
16-May	25.87	0.94	0.00	0.00	0.00	26.81
17-May	26.59	1.00	0.00	0.00	0.00	27.59
18-May	23.50	0.87	0.00	0.00	0.00	24.37
19-May	18.81	0.87	0.00	0.00	0.00	19.68
20-May	24.37	0.85	0.00	0.00	0.00	25.23
21-May	34.64	0.99	0.00	0.00	0.00	35.62
22-May	35.69	1.15	3.73	0.00	0.00	40.57
23-May	44.83	1.21	6.29	1.45	0.23	54.01
24-May	56.01	0.49	6.52	3.22	0.23	66.46
25-May	57.64	0.00	6.59	3.54	0.00	67.77
26-May	49.62	0.00	6.59	3.68	1.85	61.74
27-May	55.19	0.00	5.93	1.27	3.85	66.23
28-May	63.72	0.00	5.27	0.00	4.55	73.54
29-May	49.49	0.00	5.26	0.00	5.22	59.97
30-May	59.36	0.00	5.33	0.00	5.41	70.10
31-May	64.13	0.00	5.57	0.00	5.65	75.35
Totals ML	**1,197.97**	**15.63**	**109.67**	**25.66**	**26.97**	**1,375.90**
Avg's	38.64	0.50	3.54	0.83	0.87	44.38
Max	64.13	1.21	6.71	3.68	5.65	75.35
Min	18.81	0.00	0.00	0.00	0.00	19.68

2.0 RAW WATER QUALITY - BACTERIOLOGICAL MONITORING

Raw water samples were taken at three points at BMID settling ponds before chlorination. Samples were taken at the Mission Creek raw water intake, the outlet for Stevens Pond, and the point of disinfection at the end of Hadden Reservoir.

Samples from the previous month are also provided to show a two-month trend

Figure 2.1 - Raw Water *E.Coli* Readings (CARO Lab results) April 2024 - May 2025

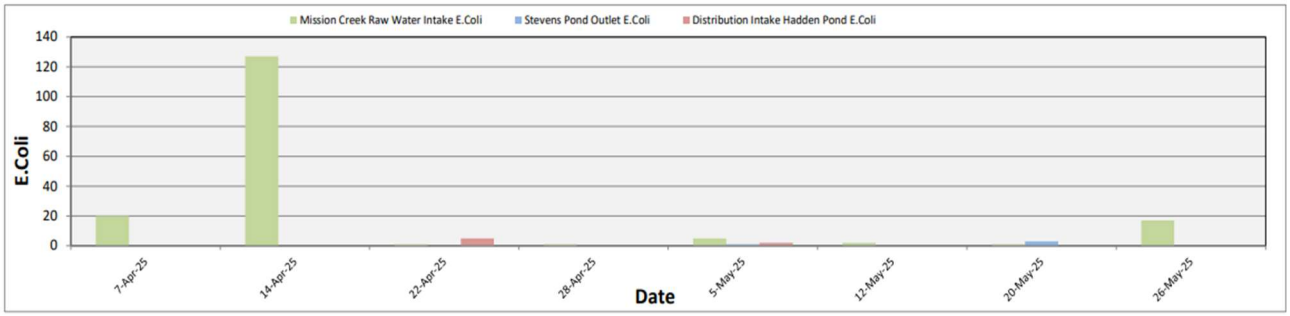


Table 2.1 - *E.Coli* Readings (CARO Labs)

Date	Mission Creek Raw Water Intake E.Coli	Stevens Pond Outlet E.Coli	Distribution Intake Hadden Pond E.Coli
7-Apr-25	20	0	0
14-Apr-25	127	0	0
22-Apr-25	1	0	5
28-Apr-25	1	0	0
5-May-25	5	1	2
12-May-25	2	0	0
20-May-25	1	3	0
26-May-25	17	0	0

Stevens or WTP Intake (Raw) - Sampling of raw water at intake from Mission Creek

Stevens Outlet (Raw) - Sampling point after exiting 142,000 m^3 1st upper balancing reservoir (Stevens Res.)

Hadden Outlet (Raw) - Sampling point after exiting 75,000 m^3 2nd lower balancing reservoir (Hadden Res.)

(*Hadden Outlet = Distribution Intake - Point of Disinfection*)

3.0 RAW AND TREATED WATER TURBIDITY

Turbidity is measured online at four locations, Mission Creek raw water intake, the Distribution Intake, the UV treatment plant, and Booster#1. The first user of the BMID system is located near Booster #1. The highest turbidity level recorded at this location was 1.11 NTU on May 5th, 2025.

Figure 3.1 – Daily Turbidity Readings
(Mission Creek Raw - Distribution Intake - Booster Station 1 and UV Plant)

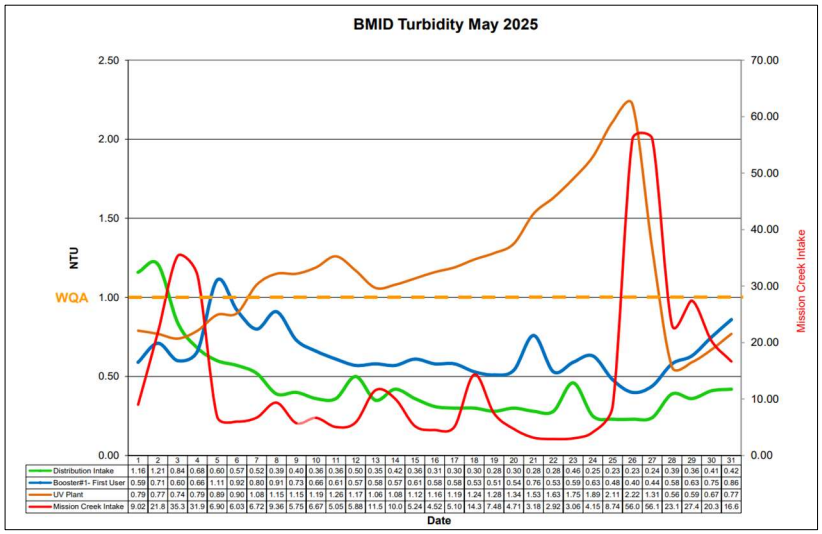


Table 3.1 - Daily Monitoring Record – Turbidity at On-Line Turbidity Analyzers

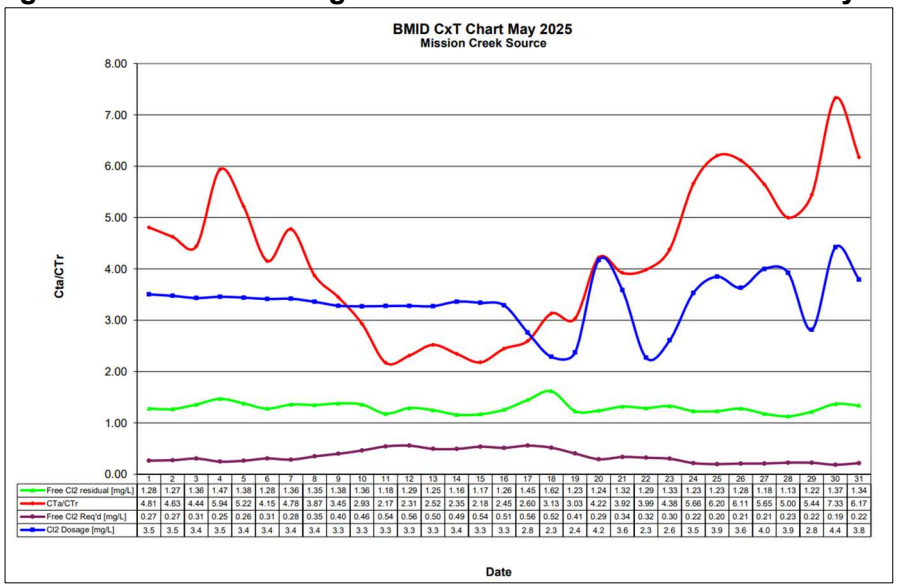
Turbidity Point Sampling for May 2025				
Date	Mission Creek Intake	Distribution Intake	UV Plant	Booster#1- First User
	Daily Average [NTU]	Daily Average [NTU]	Daily Average [NTU]	Daily Average [NTU]
1	9.02	1.16	0.79	0.59
2	21.81	1.21	0.77	0.71
3	35.35	0.84	0.74	0.60
4	31.91	0.68	0.79	0.66
5	6.90	0.60	0.89	1.11
6	6.03	0.57	0.90	0.92
7	6.72	0.52	1.08	0.80
8	9.36	0.39	1.15	0.91
9	5.75	0.40	1.15	0.73
10	6.67	0.36	1.19	0.66
11	5.05	0.36	1.26	0.61
12	5.88	0.50	1.17	0.57
13	11.56	0.35	1.06	0.58
14	10.08	0.42	1.08	0.57
15	5.24	0.36	1.12	0.61
16	4.52	0.31	1.16	0.58
17	5.10	0.30	1.19	0.58
18	14.35	0.30	1.24	0.53
19	7.48	0.28	1.28	0.51
20	4.71	0.30	1.34	0.54
21	3.18	0.28	1.53	0.76
22	2.92	0.28	1.63	0.53
23	3.06	0.46	1.75	0.59
24	4.15	0.25	1.89	0.63
25	8.74	0.23	2.11	0.48
26	56.01	0.23	2.22	0.40
27	56.10	0.24	1.31	0.44
28	23.12	0.39	0.56	0.58
29	27.44	0.36	0.59	0.63
30	20.30	0.41	0.67	0.75
31	16.66	0.42	0.77	0.86
AVG	14.04	0.44	1.17	0.65

The turbidity meter at the UV plant typically reads higher than other distribution turbidity meters. The turbidity at the Distribution Intake (upstream) and Booster #1 (downstream) had lower turbidity throughout May. Turbidity levels climbed artificially high during the middle of May. After maintenance on May 28th, the turbidity meter reading lowered to acceptable levels at the UV Plant. Because disinfection was not compromised due to the error in instrumentation, no Water Quality Advisory was called.

4.0 CHLORINE CONTACT TIME

Temperature, pH, peak flow and chlorine residual levels are recorded to determine the CT levels that are required to provide 3 log inactivation of *Giardia*. Chlorine Contact times exceeded the CT levels required to provide 3 log (99.9%) inactivation of *Giardia Lamblia* throughout the month of May, 2025.

Figure 4.1 - CT Trending – BMID Mission Creek Source – May 2025



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Free Cl2 residual [mg/L]	1.28	1.27	1.36	1.47	1.38	1.28	1.36	1.35	1.38	1.36	1.18	1.29	1.25	1.16	1.17	1.26	1.45	1.62	1.23	1.24	1.32	1.29	1.33	1.23	1.23	1.28	1.18	1.13	1.22	1.37	1.34
CTa/CTr	4.81	4.63	4.44	5.94	5.22	4.15	4.78	3.87	3.45	2.93	2.17	2.31	2.52	2.35	2.18	2.45	2.60	3.13	3.03	4.22	3.92	3.99	4.38	5.66	6.20	6.11	5.65	5.00	5.44	7.33	6.17
Free Cl2 Req'd [mg/L]	0.27	0.27	0.31	0.25	0.26	0.31	0.28	0.35	0.40	0.46	0.54	0.56	0.50	0.49	0.54	0.51	0.56	0.52	0.41	0.29	0.34	0.32	0.30	0.22	0.20	0.21	0.21	0.23	0.22	0.19	0.22
Cl2 Dosage [mg/L]	3.5	3.5	3.4	3.5	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.3	3.3	3.4	3.3	3.3	2.8	2.3	2.4	4.2	3.6	2.3	2.6	3.5	3.9	3.6	4.0	3.9	2.8	4.4	3.8

CTa – CT achieved
CTr – CT Required

The minimum CT that BMID achieved was 2.46 X that of what was required

Table 4.2 - CT Table – Mission Creek Source

BMID May 2025 Mission Creek Source													
DATE	pH (Average)	TEMP (Present)	PEAK FLOW	Free Cl2 residual	CT achieved	CT req'd	CTa/CTr	Free Cl2 Req'd [mg/L]	Cl2 Dosage mg/L	VOLUME TOTAL Liters	TIME [mins]	FLOW Daily Average L/s	Dosage Average KG/Day
May													
1	7.06	10.2	519	1.52	489	121	4.04	0.38	2.95	10029827	322	373	95
2	7.05	11.0	581	1.56	449	114	3.92	0.40	3.41	10029827	288	424	125
3	7.01	11.5	448	1.30	485	106	4.58	0.28	3.71	10029827	373	314	101
4	7.01	11.1	499	1.31	439	109	4.02	0.33	3.26	10029827	335	309	87
5	7.01	10.8	653	1.47	376	113	3.32	0.44	2.86	10029827	256	482	119
6	7.00	11.0	647	1.47	380	111	3.41	0.43	3.37	10029827	258	488	142
7	6.97	10.3	628	1.48	394	116	3.41	0.43	3.21	10029827	266	481	133
8	6.95	11.2	764	1.47	321	108	2.99	0.49	2.97	10029827	219	583	149
9	7.00	11.2	709	1.38	325	109	2.99	0.46	3.37	10029827	236	544	158
10	7.04	11.3	643	1.41	367	110	3.33	0.42	3.48	10029827	260	481	144
11	7.09	10.9	580	1.33	383	114	3.36	0.40	3.55	10029827	288	384	117
12	7.08	11.0	339	1.27	626	112	5.58	0.23	3.93	10029827	493	251	85
13	7.04	11.5	386	1.27	550	107	5.15	0.25	3.05	10029827	433	301	79
14	7.00	11.4	435	1.39	535	107	4.98	0.28	3.25	10029827	385	296	83
15	7.00	12.3	492	1.45	493	101	4.85	0.30	3.49	10029827	340	303	91
16	6.96	11.7	447	1.29	482	102	4.71	0.27	3.20	10029827	374	318	88
17	6.94	11.8	428	1.24	485	100	4.84	0.26	3.58	10029827	391	293	91
18	6.93	11.7	381	1.34	588	102	5.78	0.23	3.69	10029827	439	251	80
19	6.94	11.6	449	1.33	495	103	4.82	0.28	2.95	10029827	372	252	64
20	6.91	11.5	547	1.36	416	103	4.05	0.34	2.90	10029827	306	331	83
21	6.89	11.5	627	1.50	400	103	3.87	0.39	3.19	10029827	267	428	118
22	6.86	11.4	610	1.49	408	103	3.98	0.37	3.08	10029827	274	458	122
23	6.88	12.0	719	1.41	328	98	3.33	0.42	3.11	10029827	232	568	153
24	6.97	12.2	865	1.33	257	100	2.58	0.52	3.26	10029827	193	678	191
25	7.07	12.0	835	1.49	298	107	2.79	0.53	3.35	10029827	200	679	196
26	7.13	12.2	773	1.59	344	109	3.16	0.50	3.45	10029827	216	574	171
27	7.15	12.2	785	1.72	366	111	3.30	0.52	3.14	10029827	213	703	191
28	7.23	12.3	898	1.61	300	112	2.66	0.60	3.43	10029827	186	746	221
29	7.23	12.3	795	1.53	322	112	2.88	0.53	3.46	10029827	210	570	171
30	7.21	12.6	930	1.56	280	109	2.58	0.61	3.05	10029827	180	759	200
31	7.22	12.6	924	1.47	266	108	2.46	0.60	3.59	10029827	181	698	216
Averages	7.03	11.56	624	1.43	408	108	3.80	0.40	3.30	10029827	289.9	461.90	131.16

5.0 ULTRAVIOLET DISINFECTION

Total Water Treated:	1,197,968 m^3	100.000%
On-Spec Water:	1,197,950 m^3	99.999%
Off-Spec Water:	18 m^3	0.001%

Average monthly chlorine residual before UV Treatment was 1.52 mg/L
The average monthly chlorine residual after UV treatment and re-chlorination was 1.49 mg/L.

Figure 5.1 - UV Disinfection – BMID Mission Creek Source – May 2025

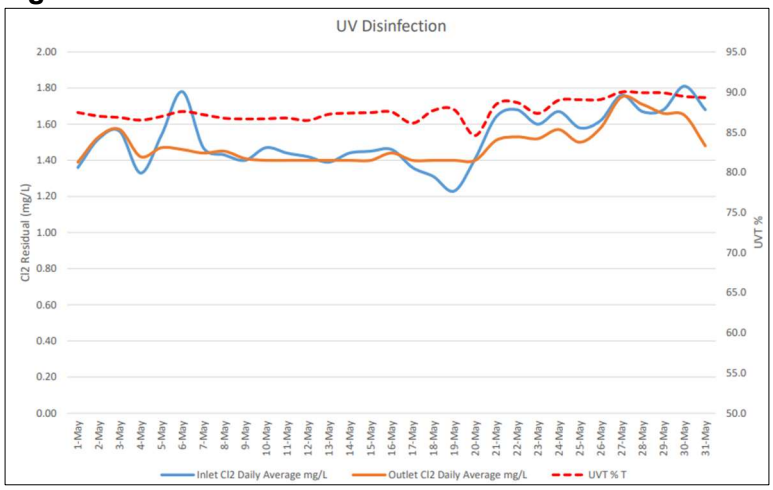


Table 5.2 - UV Disinfection Table – Mission Creek Source

	Inlet Cl2 Daily	Outlet Cl2 Daily		UVT	Turbidity		In Spec Water	Off Spec Water	Off Spec % of Water Volume
Date	mg/L	mg/L		% T	NTU		Cubic Meters	Cubic Meters	Percentage
1-May	1.36	1.39		87.5	0.79		27799	0	0.00%
2-May	1.52	1.53		87.0	0.77		36495	0	0.00%
3-May	1.56	1.57		86.8	0.74		29420	0	0.00%
4-May	1.33	1.42		86.5	0.79		25426	0	0.00%
5-May	1.54	1.47		87.0	0.89		34829	0	0.00%
6-May	1.78	1.46		87.6	0.90		42340	0	0.00%
7-May	1.47	1.44		87.2	1.08		40267	0	0.00%
8-May	1.43	1.45		86.7	1.15		45211	0	0.00%
9-May	1.40	1.41		86.7	1.15		47800	0	0.00%
10-May	1.47	1.40		86.7	1.19		43657	0	0.00%
11-May	1.44	1.40		86.8	1.26		35510	17	0.05%
12-May	1.42	1.40		86.5	1.17		25261	1	0.00%
13-May	1.39	1.40		87.2	1.06		23244	0	0.00%
14-May	1.44	1.40		87.4	1.08		24435	0	0.00%
15-May	1.45	1.40		87.4	1.12		26785	0	0.00%
16-May	1.46	1.44		87.5	1.16		25870	0	0.00%
17-May	1.36	1.40		86.1	1.19		26593	0	0.00%
18-May	1.31	1.40		87.7	1.24		23498	0	0.00%
19-May	1.23	1.40		87.8	1.28		18814	0	0.00%
20-May	1.41	1.40		84.6	1.34		24374	0	0.00%
21-May	1.64	1.51		88.5	1.53		34638	0	0.00%
22-May	1.68	1.53		88.7	1.63		35694	0	0.00%
23-May	1.60	1.52		87.3	1.75		44833	0	0.00%
24-May	1.67	1.57		89.0	1.89		56008	0	0.00%
25-May	1.58	1.50		89.1	2.11		57644	0	0.00%
26-May	1.62	1.58		89.1	2.22		49620	0	0.00%
27-May	1.76	1.75		90.0	1.31		55187	0	0.00%
28-May	1.67	1.71		89.9	0.56		63719	0	0.00%
29-May	1.68	1.66		89.9	0.59		49490	0	0.00%
30-May	1.81	1.65		89.5	0.67		59360	0	0.00%
31-May	1.68	1.48		89.3	0.77		64130	0	0.00%
Average	1.52	1.49		87.7	1.17	Total	1197950	18	0.001%

6.0 WATER DISTRIBUTION SAMPLING (TREATED)

Third Party Analysis (CARO Analytical Services)

- Samples taken once per week at ten locations around the BMID service area
- 24 samples were found to be absent of Coliforms.
- 24 samples were found to be absent of *E.Coli*.

Table 6.1 - CARO Independent Lab Testing – Total Coliforms – *E.Coli*

	2921 Belgo Rd		Booster 1		Ellison Blow-Off		Ellison School		3976 Highway 97		Prospect Reservoir		Tower Reservoir		Well #5		Well #4		Kirschner Res		Pearson School	
Date	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli
7-Apr-25			0	0			0	0	0	0			0	0			0	0				
14-Apr-25	0	0	0	0							0	0					0	0	0	0	0	0
22-Apr-25			0	0			0	0	0	0			0	0			0	0				
28-Apr-25	0	0	0	0							0	0					0	0	0	0	0	0
5-May-25			0	0			0	0	0	0			0	0			0	0				
12-May-25	0	0	0	0							0	0			0	0			0	0	0	0
20-May-25			0	0			0	0	0	0			0	0	0	0						
26-May-25	0	0	0	0							0	0					0	0	0	0	0	0

In-House Analysis (BMID Staff)

- Presence/Absence samples taken on a three-week cycle at seven sites around the BMID service area.
- All 9 samples were found to be absent of both *Total Coliforms* and *E.Coli*.

Table 6.2 - BMID In-house Testing – Presence Absence

	5/5/2025				5/13/2025				5/20/2025				5/26/2025			
Location	Cl2	Temp.	Pres.	Abs.	Cl2	Temp.	Pres.	Abs.	Cl2	Temp.	Pres.	Abs.	Cl2	Temp.	Pres.	Abs.
Sylvania Cres									0.66	14.5	-	X				
170 Kneller Rd									0.49	14.7	-	X				
2105 Morrison	0.82	12.0	-	X									1.13	16.2	-	X
Staymen Rd	0.69	11.8	-	X									1.09	13.1	-	X
260 Campion Rd					0.23	13.3	-	X								
Fenwick Rd					0.26	13.7	-	X								
Solly Ct									0.49	15.5	-	X				

7.0 WELL #6 POTENTIAL POTABILITY TESTING

- BMID will take monthly bacterial samples on the raw water at Well #6 to determine the potential potability of the source. Results are as follows:

Well 6 Bacterial Testing		
Date	Total Coliforms	E.Coli Coliforms
24-Jun-24	0	0
29-Jul-24	0	0
26-Aug-24	0	0
28-Oct-24	0	0
25-Nov-24	0	0
31-Dec-24	0	0
27-Jan-25	0	0
24-Feb-25	0	0
24-Mar-25	0	0
28-Apr-25	0	0
26-May-25	0	0