



# MONTHLY REPORTING PERIOD - FEBRUARY, 2025

## SUMMARY

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

### WATER SUPPLY SUMMARY

Water Source	Active / Not Active	Volume (Mega Liters)	Irrigation / Domestic	Comments
<b>Mission Ck.</b>	<b>Active</b>	<b>204.41</b>	<b>Domestic</b>	Primary Water supply. Domestic demand only this month.
Scotty Creek	Not Active	0	Irrig. only	Scotty Creek source will resume operations in summer 2025
Well 3 Cornish	Not Active	0	Irrig. only	Well #3 upgrade underway to provide for irrigation
<b>Well 4</b>	<b>Active</b>	<b>11.26</b>	<b>Domestic</b>	Primary domestic source to Scotty Creek service area
Well 5	Not Active	0	Irrig. only	Well #5 will resume supply in summer 2025
Well 6	Not Active	0	Irrig. only	Well # 6 will resume supply in summer 2025
February 2025	<b>Total:</b>	<b>215.67</b>		<b>10 Year Average for February = 225.85</b>

### WATER QUALITY SUMMARY

Raw Water Microbiological Summary		E-Coli		
Location	# of Samples	Lowest <i>E.Coli</i> Reading	Ave. <i>E.Coli</i> Reading	Highest <i>E.Coli</i> Reading
Mission Creek Intake	4	0	0.75	2
Stevens Reservoir	4	0	0.75	3
Hadden Reservoir	4	0	0.25	1
Treated Water Microbiological Summary		Turbidity Summary		
Location	Low Reading	Average Reading	High Reading	Comments
Mission Creek Raw Water	0.21 NTU	0.69 NTU	3.36 NTU	
Distribution Intake	0.25 NTU	0.31 NTU	0.47 NTU	
Booster # 1 (first customer)	0.26 NTU	0.31 NTU	0.44 NTU	
UV Treatment Plant	0.47 NTU	0.49 NTU	0.56 NTU	
		UV Treatment Plant		
Plant Flow Volume	In-Spec	Off-Spec	% Off-Spec	Comments
m <sup>3</sup>	212,930 m <sup>3</sup>	258 m <sup>3</sup>	0.1213%	Off-spec incident on February 24

### WATER QUALITY DISTRIBUTION TESTING

		CARO (third party) Testing	22
BMID Population:	30,000	In House Pres./Absence	10
Required Minimum # of Tests:	30	Total Tests:	<b>32</b>
		Total Positive Tests:	<b>0</b>

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



### 1.0 FLOWS - FEBRUARY, 2025

Mission Creek provided 95% of the 215.7 Mega Liters used in the BMID system in February, with Well # 4 supplying the remaining 5%.

Figure 1.1 - Domestic Water System Flow

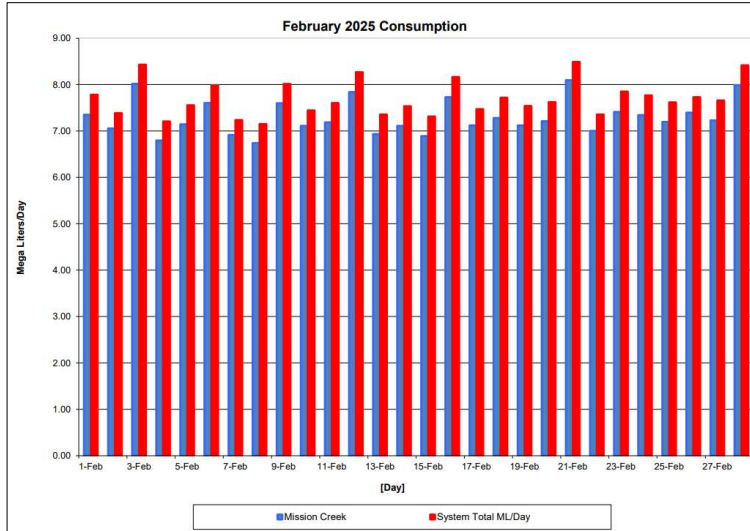


Table 1.2 - February 2025 - Daily Consumption Report

Year	Mission Creek	Well #4	Well #5	Well #6	System Total
2025	ML/Day	ML/Day	ML/Day	ML/Day	ML/Day
1-Feb	7.35	0.43	0	0	7.78
2-Feb	7.06	0.33	0	0	7.39
3-Feb	8.02	0.41	0	0	8.43
4-Feb	6.80	0.41	0	0	7.21
5-Feb	7.14	0.41	0	0	7.56
6-Feb	7.60	0.38	0	0	7.98
7-Feb	6.91	0.32	0	0	7.24
8-Feb	6.74	0.41	0	0	7.15
9-Feb	7.60	0.42	0	0	8.01
10-Feb	7.11	0.34	0	0	7.45
11-Feb	7.19	0.42	0	0	7.60
12-Feb	7.84	0.43	0	0	8.27
13-Feb	6.93	0.42	0	0	7.35
14-Feb	7.11	0.42	0	0	7.53
15-Feb	6.89	0.42	0	0	7.31
16-Feb	7.73	0.44	0	0	8.17
17-Feb	7.12	0.35	0	0	7.47
18-Feb	7.28	0.44	0	0	7.72
19-Feb	7.12	0.42	0	0	7.54
20-Feb	7.21	0.41	0	0	7.62
21-Feb	8.09	0.39	0	0	8.49
22-Feb	7.00	0.36	0	0	7.36
23-Feb	7.41	0.44	0	0	7.85
24-Feb	7.34	0.42	0	0	7.77
25-Feb	7.20	0.42	0	0	7.62
26-Feb	7.40	0.33	0	0	7.73
27-Feb	7.23	0.43	0	0	7.66
28-Feb	7.99	0.43	0	0	8.42
<b>Totals ML</b>	<b>204.41</b>	<b>11.26</b>	<b>0.00</b>	<b>0.00</b>	<b>215.67</b>
Totals ML	0.00	0.00	0.00	0.00	0
Avg's	7.30	0.00			7.70
Max	8.09	0.00			8.49
Min	6.74	0.00			7.15

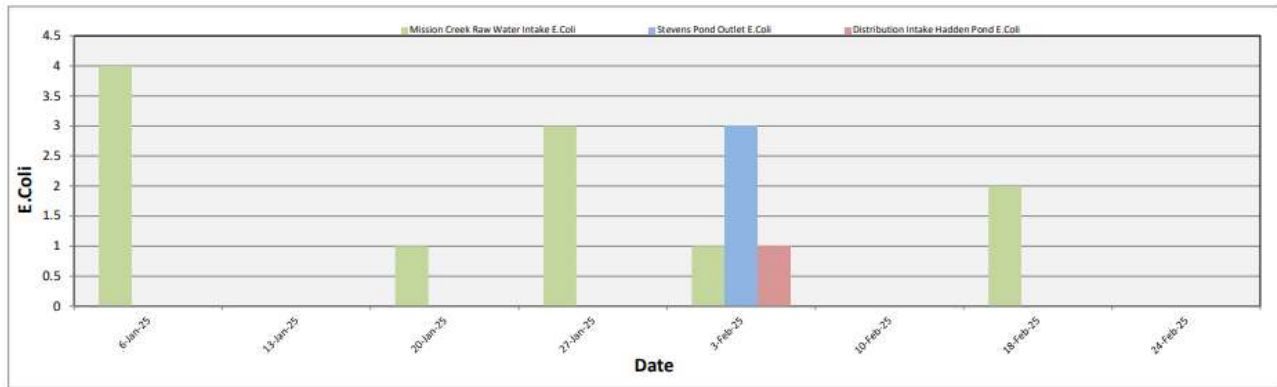


## 2.0 RAW WATER QUALITY - BACTERIOLOGICAL MONITORING

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) January 2024 - February 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
6-Jan-25	4	0	0
13-Jan-25	0	0	0
20-Jan-25	1	0	0
27-Jan-25	3	0	0
3-Feb-25	1	3	1
10-Feb-25	0	0	0
18-Feb-25	2	0	0
24-Feb-25	0	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<sup>3</sup> 1<sup>st</sup> upper balancing reservoir (Stevens Res.)

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

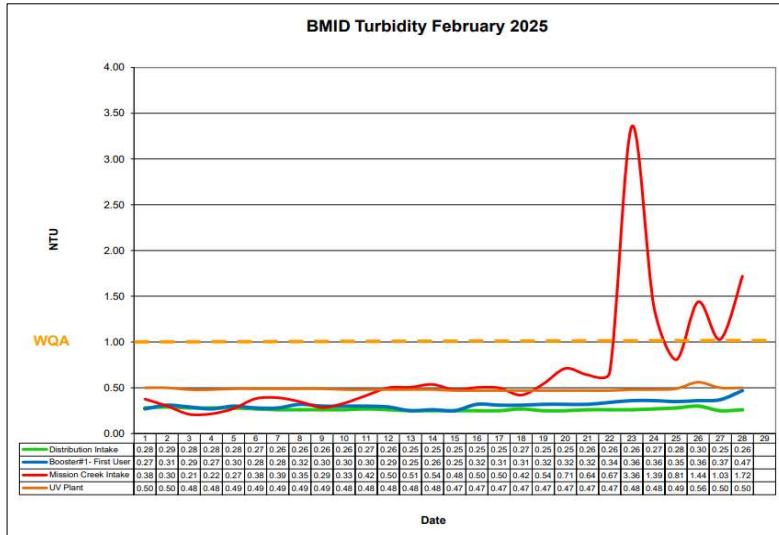
*(Hadden Outlet = Distribution Intake - Point of Disinfection)*



### 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 0.47 NTU on February 28<sup>th</sup>, 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**

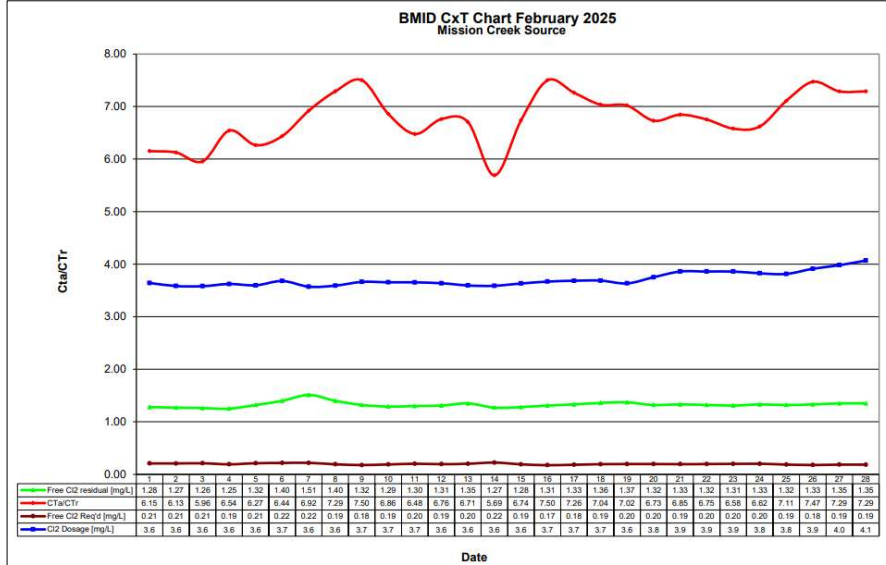
Turbidity Point Sampling for February 2025				
Date	Mission Creek Intake	Distribution Intake	Booster#1- First User	UV Plant
	Daily Average [NTU]	Daily Average NTU	Daily Average NTU	Daily Average [NTU]
1	0.38	0.28	0.27	0.50
2	0.30	0.29	0.31	0.50
3	0.21	0.28	0.29	0.48
4	0.22	0.28	0.27	0.48
5	0.27	0.28	0.30	0.49
6	0.38	0.27	0.28	0.49
7	0.39	0.26	0.28	0.49
8	0.35	0.26	0.32	0.49
9	0.29	0.26	0.30	0.49
10	0.33	0.26	0.30	0.48
11	0.42	0.27	0.30	0.48
12	0.50	0.26	0.29	0.48
13	0.51	0.25	0.25	0.48
14	0.54	0.25	0.26	0.48
15	0.48	0.25	0.25	0.47
16	0.50	0.25	0.32	0.47
17	0.50	0.25	0.31	0.47
18	0.42	0.27	0.31	0.47
19	0.54	0.25	0.32	0.47
20	0.71	0.25	0.32	0.47
21	0.64	0.26	0.32	0.47
22	0.67	0.26	0.34	0.47
23	3.36	0.26	0.36	0.48
24	1.39	0.27	0.36	0.48
25	0.81	0.28	0.35	0.49
26	1.44	0.30	0.36	0.56
27	1.03	0.25	0.37	0.50
28	1.72	0.26	0.47	0.50
29		0.26	0.47	0.50
AVG	0.69	0.26	0.31	0.49



### 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 February, 2025.

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



CTa – CT achieved  
CTr – CT Required

The minimum CT that BMID achieved was 5.66 X that of what was required

Table 4.2 - CT Table – Mission Creek Source

BMID February 2024 Mission Creek Source													
DATE	pH (Average)	TEMP (Present) [°C]	PEAK FLOW L/s	Free Cl2 residual [mg/L]	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 Liters/Second	Dosage Average KG/Day
February 1	7.27	3.2	128	1.20	1571.5	205.2	7.66	0.16	21.2	10029827	1310	86	22
2	7.28	3.2	118	1.21	1720.0	206.2	8.34	0.15	21.0	10029827	1421	83	21
3	7.29	3.1	129	1.18	1528.5	207.7	7.36	0.16	20.9	10029827	1295	94	24
4	7.28	2.9	114	1.14	1671.6	208.7	8.01	0.14	21.1	10029827	1466	80	20
5	7.28	2.9	120	1.15	1605.3	209.0	7.68	0.15	21.1	10029827	1396	84	21
6	7.27	2.8	130	1.17	1505.1	210.2	7.16	0.16	20.9	10029827	1286	90	22
7	7.27	2.7	114	1.23	1806.8	213.2	8.47	0.15	21.2	10029827	1469	81	21
8	7.27	2.7	113	1.21	1790.8	212.7	8.42	0.14	21.3	10029827	1480	79	20
9	7.27	2.6	125	1.24	1652.3	215.0	7.69	0.16	21.0	10029827	1333	89	23
10	7.27	2.7	128	1.23	1600.7	213.2	7.51	0.16	21.2	10029827	1301	83	21
11	7.27	2.1	117	1.22	1749.8	222.0	7.88	0.15	21.1	10029827	1434	83	21
12	7.26	2.4	125	1.21	1614.9	216.4	7.46	0.16	21.6	10029827	1335	92	24
13	7.26	2.5	125	1.19	1593.3	214.4	7.43	0.16	22.2	10029827	1339	81	22
14	7.26	2.8	135	1.30	1608.5	212.8	7.56	0.17	21.0	10029827	1237	84	21
15	7.26	2.9	123	1.35	1835.5	212.5	8.64	0.16	21.1	10029827	1360	81	21
16	7.26	3.1	128	1.35	1756.9	209.6	8.38	0.16	21.0	10029827	1301	91	23
17	7.26	3.2	118	1.36	1931.5	208.3	9.27	0.15	21.1	10029827	1420	83	21
18	7.26	3.3	122	1.30	1784.2	205.5	8.68	0.15	21.2	10029827	1372	86	22
19	7.26	3.3	117	1.24	1767.1	204.0	8.66	0.14	21.4	10029827	1425	84	22
20	7.25	3.6	185	1.25	1128.9	199.3	5.66	0.22	21.5	10029827	903	85	22
21	7.25	3.6	139	1.32	1590.9	201.0	7.92	0.17	21.3	10029827	1205	94	24
22	7.25	3.5	126	1.38	1829.4	203.7	8.98	0.15	21.5	10029827	1326	81	21
23	7.24	3.6	129	1.28	1663.2	199.3	8.34	0.15	21.1	10029827	1299	88	22
24	7.24	3.6	120	1.28	1777.9	199.3	8.92	0.14	21.4	10029827	1389	84	22
25	7.24	3.6	118	1.30	1849.5	199.8	9.26	0.14	21.0	10029827	1423	85	21
26	7.25	3.0	125	1.34	1791.3	210.0	8.53	0.16	21.2	10029827	1337	86	22
27	7.25	4.0	121	1.33	1837.4	195.7	9.39	0.14	20.8	10029827	1382	85	21
28	7.01	4.1	129	1.30	1678.7	176.9	9.49	0.14	20.8	10029827	1291	94	23
Averages	7.25	3.1	126	1.26	1687.2	200	8.17	0.2	21	9775336	1340.6	86	21.77



### 5.0 ULTRAVIOLET DISINFECTION

Total Water Treated: 213,188 m<sup>3</sup> 100.00%  
 On-Spec Water: 212,930 m<sup>3</sup> 99.986%  
 Off-Spec Water: 258 m<sup>3</sup> 0.014%

Average monthly chlorine residual before UV Treatment was 1.40 mg/L  
 The average monthly chlorine residual after UV treatment and re-chlorination was 1.41 mg/L.

On February 24 BMID crews were involved in troubleshooting programming at the UV plant. 82m<sup>3</sup> of off-spec water was created during this event. Primary disinfection remained in place at all times throughout the event. Additionally, the UVT meter was bypassed for 2.5 hours on February 11 for routine maintenance leading to a mis-recorded 118 m<sup>3</sup> of off-spec water.

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

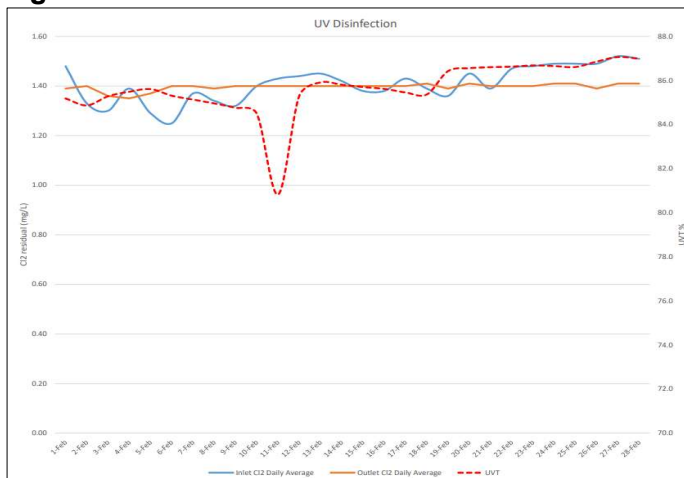


Table 5.2 - UV Disinfection Table – Mission Creek Source

Date	Inlet Cl2 Daily Average mg/L	Outlet Cl2 Daily Average mg/L	UVT % T	Turbidity NTU	In Spec Water Volume Cubic Meters	Off Spec Water Cubic Meters	Off Spec % of Water Percentage
1-Feb	1.48	1.39	85.2	0.50	7351.7	0	0.00%
2-Feb	1.33	1.4	84.9	0.50	7055	0	0.00%
3-Feb	1.30	1.36	85.3	0.48	8017.2	0	0.00%
4-Feb	1.39	1.35	85.5	0.48	6795.1	0	0.00%
5-Feb	1.29	1.37	85.6	0.49	7142.9	0	0.00%
6-Feb	1.25	1.4	85.3	0.49	7602.8	0	0.00%
7-Feb	1.37	1.4	85.1	0.49	6913.8	0	0.00%
8-Feb	1.34	1.39	85.0	0.49	6739.7	0	0.00%
9-Feb	1.32	1.4	84.8	0.49	7598.3	0	0.00%
10-Feb	1.40	1.4	84.5	0.48	7109.7	0	0.00%
11-Feb	1.43	1.4	80.8	0.48	7068.1	118	1.67%
12-Feb	1.44	1.4	85.3	0.48	7834	5.9	0.08%
13-Feb	1.45	1.4	85.9	0.48	6933.6	0	0.00%
14-Feb	1.42	1.4	85.8	0.48	7109.9	0	0.00%
15-Feb	1.38	1.4	85.7	0.47	6891	0	0.00%
16-Feb	1.38	1.4	85.6	0.47	7729.4	0	0.00%
17-Feb	1.43	1.4	85.5	0.47	7120.2	0	0.00%
18-Feb	1.39	1.41	85.4	0.47	7280.9	0	0.00%
19-Feb	1.36	1.39	86.4	0.47	7121.2	0	0.00%
20-Feb	1.45	1.41	86.6	0.47	7211.1	0	0.00%
21-Feb	1.39	1.4	86.6	0.47	12746.5	0	0.00%
22-Feb	1.47	1.4	86.6	0.47	6972.8	27.9	0.40%
23-Feb	1.48	1.4	86.7	0.48	7410.4	1.4	0.02%
24-Feb	1.49	1.41	86.7	0.48	7261.8	82.3	1.13%
25-Feb	1.49	1.41	86.6	0.49	7191.8	4.1	0.06%
26-Feb	1.49	1.39	86.9	0.56	11522.4	0	0.00%
27-Feb	1.52	1.41	87.1	0.50	7212.4	17.8	0.25%
28-Feb	1.51	1.41	87.0	0.50	7985.9	0.9	0.01%
Average	1.41	1.40	85.6		Total 212929.6	258.3	0.1213%



## 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
- 22 samples were found to be absent of Coliforms.
- 22 samples were found to be absent of *E. Coli*.

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

Date	2921 Belgo Rd		Booster 1		Elison Blow-Off		Elison School		3976 Highway 97		Prospect Reservoir		Tower Reservoir		Well #4		Kirschner Res		Pearson School	
	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
6-Jan-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jan-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jan-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Feb-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Feb-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Feb-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Feb-25	0	0	0	0	0	0	0	0	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 10 samples were found to be absent of both *Total Coliforms* and *E. Coli*.

**Table 6.2 - BMID In-house Testing – Presence Absence**

Location	2/3/2025				2/10/2025				2/18/2025				2/24/2025			
	Cl2	Temp.	Pres.	Abs.	Cl2	Temp.	Pres.	Abs.	Cl2	Temp.	Pres.	Abs.	Cl2	Temp.	Pres.	Abs.
Sylvania Cres	0.79	9.8	-	X									0.83	9.4	-	X
170 Kneller Rd	0.79	8.6	-	X									0.84	7.2	-	X
2105 Morrison					0.82	8.2	-	X								
Staymen Rd					0.64	8.6	-	X								
260 Campion Rd									0.46	9.2	-	X				
Fenwick Rd									0.56	9.0	-	X				
Solly Ct	1.01	7.7	-	X									1.03	7.4	-	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