# **MONTHLY REPORTING PERIOD -**

SEPTEMBER, 2025

2025

Month: September

## **SUMMARY**

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

#### **WATER SUPPLY SUMMARY**

Water Source	Active / Not Active	Volume (Mega Liters)	Irrigation / Domestic	Comments
Mission Ck.	Active	1,322.2	Domestic/Irrig.	Primary Water supply. Domestic and irrig. demand.
Scotty Creek	Active	113.9	Irrig. only	Scotty Creek source ended operations in September 2025
Well 3 Cornish	Not Active	0	Irrig. only	Well #3 upgrade underway to provide for irrigation
Well 4	Active	9.3	Domestic	Well 4 resumed operations September 2025
Well 5	Active	150.9	Domestic/Irrig	Well #5 ended operations in September 2025
Well 6	Active	19.5	Irrig. only	Well # 6 ended operations in September 2025
September 2025	Total:	1,615.9		10 Year Average for September = 1,290.33

### **WATER QUALITY SUMMARY**

Raw Water Microbiological S	ummary	E-Coli		
Location	# of Samples	Lowest E.Coli Reading	Ave. E. Coli Reading	Highest E.Coli Reading
Mission Creek Intake	5	3	13.4	33
Stevens Reservoir	5	0	1.0	3
Hadden Reservoir	5	0	0.6	2
Treated Water Microbiologica	al Summary	Turbidity Summary		
Location	Low Reading	Average Reading	High Reading	Comments
Mission Creek Raw Water	0.86 NTU	1.12 NTU	1.40 NTU	
Distribution Intake	0.21 NTU	0.36 NTU	0.80 NTU	
UV Plant	0.37 NTU	0.45 NTU	0.56 NTU	
Booster # 1 (first customer)	0.20 NTU	0.31 NTU	0.41 NTU	
		UV Treatment Plant		
Plant Flow Volume	In-Spec	Off-Spec	% Off-Spec	Comments
m <sup>3</sup>	1,322,122 m <sup>3</sup>	119 m³	0.009%	

## WATER QUALITY DISTRIBUTION TESTING

		CARO (third party) Testing	30	
BMID Population:	30,000	In House Pres./Absence	12	
Required Minimum # of Tests:	30	Total Tests:	42	
		Total Positive Tests:	0	

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

## 1.0 FLOWS - SEPTEMBER, 2025

Mission Creek provided 82% of the 1616 Mega Liters used in the BMID system in September, with Well 4, Well #5, Well #6 and Scotty Creek supplying the remaining 18%.

Figure 1.1 - Domestic Water System Flow

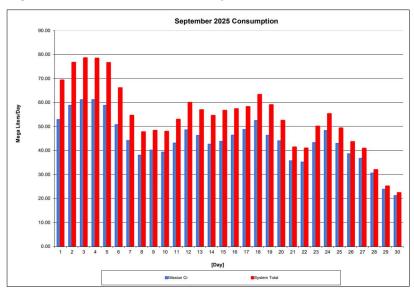


Table 1.2 - September 2025 - Daily Consumption Report

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-Sep	52.85	0.00	6.24	1.32	8.88	69.29
2-Sep	58.77	0.00	6.25	1.64	10.00	76.66
3-Sep	61.10	0.00	6.25	1.75	9.46	78.55
4-Sep	61.14	0.00	6.26	1.40	9.60	78.40
5-Sep	58.75	0.00	6.25	1.52	10.03	76.54
6-Sep	50.74	0.00	6.24	1.56	7.51	66.05
7-Sep	44.09	0.00	6.18	0.00	4.31	54.58
8-Sep	37.98	0.00	6.00	0.00	3.73	47.70
9-Sep	40.09	0.00	5.56	0.00	2.64	48.29
10-Sep	39.25	0.00	5.55	0.00	3.09	47.89
11-Sep	43.03	0.00	5.18	0.00	4.70	52.90
12-Sep	48.51	0.00	5.33	0.00	6.13	59.97
13-Sep	46.21	0.00	5.57	1.00	4.10	56.88
14-Sep	42.57	0.00	5.70	3.39	2.89	54.54
15-Sep	43.72	0.00	5.06	3.53	4.35	56.65
16-Sep	46.30	0.00	6.02	0.78	4.20	57.31
17-Sep	48.65	0.00	6.26	0.00	3.28	58.20
18-Sep	52.44	0.00	6.26	0.00	4.55	63.26
19-Sep	46.25	0.00	6.23	0.00	6.53	59.01
20-Sep	43.98	0.00	5.40	0.00	3.09	52.47
21-Sep	35.66	0.00	4.86	0.00	0.84	41.37
22-Sep	35.12	0.00	5.12	0.67	0.00	40.91
23-Sep	43.23	0.15	5.73	0.97	0.00	50.07
24-Sep	48.25	1.03	5.97	0.00	0.00	55.25
25-Sep	42.92	1.49	4.90	0.00	0.00	49.32
26-Sep	38.57	1.41	3.62	0.00	0.00	43.60
27-Sep	36.66	1.40	2.80	0.00	0.00	40.85
28-Sep	30.54	1.30	0.11	0.00	0.00	31.94
29-Sep	23.78	1.33	0.00	0.00	0.00	25.11
30-Sep	21.12	1.23	0.00	0.00	0.00	22.35
Totals ML	1,322.2	9.3	150.9	19.5	113.9	1,615.9
Avg's	44.1	0.3	5.0	0.7	3.8	53.9
Max	61.1	1.5	6.3	3.5	10.0	78.5
Min	21.1	0.0	0.0	0.0	0.0	22.4

#### 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



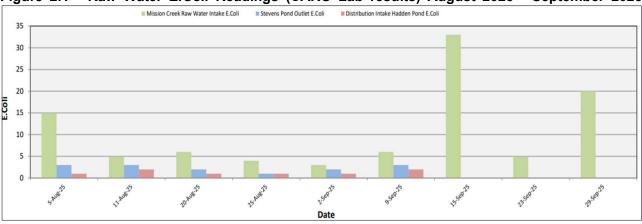


Table 2.1 - E.Coli Readings (CARO Labs)

	Mission Creek Raw	Stevens Pond Outlet	Distribution Intake
Date	Water Intake E.Coli	E.Coli	Hadden Pond E.Coli
5-Aug-25	15	3	1
11-Aug-25	5	3	2
20-Aug-25	6	2	1
25-Aug-25	4	1	1
2-Sep-25	3	2	1
9-Sep-25	6	3	2
15-Sep-25	33	0	0
23-Sep-25	5	0	0
29-Sep-25	20	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> 1st 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 0.41 NTU on September 9, 2025.

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

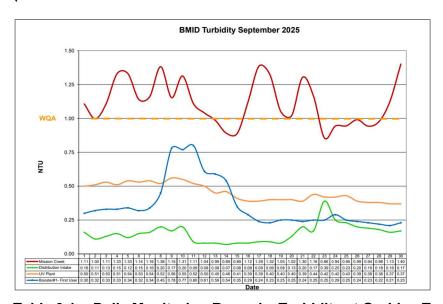


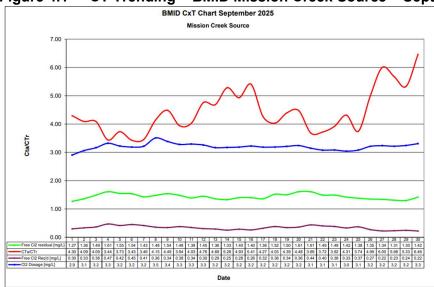
Table 3.1 - Daily Monitoring Record - Turbidity at On-Line Turbidity Analyzers

	Turbidity	Point Sampling f	or September 202	5
Date	Mission Creek Intake		UV Plant	Booster#1- First User
Date	Daily Average [NTU]	Daily Average [NTU]	Daily Average [NTU]	Daily Average [NTU]
1	1.11	0.30	0.50	0.35
2	1.00	0.32	0.51	0.34
3	1.11	0.33	0.53	0.37
4	1.33	0.33	0.51	0.36
5	1.33	0.34	0.54	0.38
6	1.14	0.32	0.53	0.37
7	1.16	0.34	0.54	0.39
8	1.38	0.45	0.52	0.37
9	1.15	0.78	0.56	0.41
10	1.31	0.77	0.55	0.40
11	1.11	0.80	0.52	0.39
12	1.04	0.61	0.50	0.38
13	0.99	0.59	0.45	0.30
14	0.89	0.54	0.46	0.32
15	0.89	0.35	0.41	0.28
16	1.12	0.29	0.39	0.27
17	1.39	0.24	0.39	0.29
18	1.32	0.23	0.40	0.27
19	1.05	0.25	0.40	0.25
20	1.02	0.25	0.40	0.30
21	1.30	0.24	0.39	0.26
22	1.16	0.25	0.44	0.28
23	0.86	0.25	0.42	0.30
24	0.94	0.29	0.42	0.29
25	0.95	0.25	0.43	0.24
26	0.99	0.24	0.39	0.23
27	0.94	0.23	0.38	0.24
28	0.98	0.22	0.38	0.20
29	1.13	0.21	0.37	0.22
30	1.40	0.23	0.37	0.21
Average	1.12	0.36	0.45	0.31

## 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 September, 2025.

Figure 4.1 - CT Trending - BMID Mission Creek Source - September 2025



CTa – CT achieved CTr – CT Required

The minimum CT that BMID achieved was 3.63 X that of what was required

Table 4.2 - CT Table - Mission Creek Source

						BMID Se	ptember 2	2025					
						Mission	Creek Sou	irce					
DATE	pН	TEMP	PEAK	Free Cl2	CT	CT	CTa/CTr	Free Cl2	CI2	VOLUME	TIME	FLOW	Dosage
DATE	(Average)	(Present)	FLOW	residual	achieved	req'd		Req'd	Dosage	TOTAL		Daily Average	
Septembe	r							[mg/L]	mg/L	Liters	[mins]	L/s	KG/Day
1	7.30	18.4	791	1.34	283.0	73.5	3.85	0.35	3.70	10029827	211	608	195
2	7.34	18.6	766	1.39	303.3	74.0	4.10	0.34	3.69	10029827	218	664	212
3	7.37	18.7	830	1.33	267.7	73.8	3.63	0.37	3.71	10029827	201	687	220
4	7.32	18.8	807	1.36	281.8	72.2	3.90	0.35	3.78	10029827	207	650	212
5	7.27	18.4	836	1.45	289.9	73.6	3.94	0.37	3.85	10029827	200	653	217
6	7.24	18.0	754	1.43	317.1	74.7	4.25	0.34	3.83	10029827	222	570	189
7	7.21	17.7	712	1.43	335.6	75.4	4.45	0.32	3.82	10029827	235	483	159
8	7.20	17.3	577	1.41	408.6	77.0	5.30	0.27	3.74	10029827	290	422	136
9	7.18	17.4	570	1.40	410.6	75.9	5.41	0.26	3.76	10029827	293	451	147
10	7.15	17.0	581	1.35	388.3	76.7	5.06	0.27	3.83	10029827	288	439	146
11	7.14	17.1	674	1.31	324.7	75.5	4.30	0.30	3.84	10029827	248	483	160
12	7.14	17.1	636	1.32	346.8	75.6	4.59	0.29	3.84	10029827	263	534	177
13	7.17	17.2	512	1.38	450.9	76.5	5.90	0.23	3.84	10029827	327	512	170
14	7.20	17.4	745	1.54	345.4	77.5	4.45	0.35	3.85	10029827	224	483	161
15	7.21	17.2	620	1.56	420.7	79.1	5.32	0.29	3.80	10029827	270	486	160
16	7.23	17.2	606	1.53	422.4	79.4	5.32	0.29	3.77	10029827	276	504	164
17	7.26	17.3	693	1.51	364.4	79.6	4.58	0.33	3.75	10029827	241	551	178
18	7.29	17.2	655	1.47	374.9	80.7	4.64	0.32	3.74	10029827	255	583	188
19	7.31	16.8	680	1.51	370.9	83.9	4.42	0.34	3.72	10029827	246	517	166
20	7.34	16.1	657	1.51	383.9	89.1	4.31	0.35	3.69	10029827	254	492	157
21	7.35	16.2	684	1.41	344.5	87.9	3.92	0.36	3.72	10029827	244	389	125
22	7.35	15.9	565	1.51	446.4	90.7	4.92	0.31	3.70	10029827	296	397	127
23	7.31	15.1	614	1.56	416.6	94.9	4.39	0.35	3.69	10029827	272	483	154
24	7.30	15.5	654	1.53	386.0	91.7	4.21	0.36	3.69	10029827	256	527	168
25	7.26	15.2	658	1.51	383.4	92.1	4.16	0.36	3.68	10029827	254	483	154
26	7.25	14.2	579	1.62	467.9	99.4	4.71	0.34	3.62	10029827	289	433	136
27	7.27	14.4	526	1.66	527.7	99.1	5.33	0.31	3.57	10029827	318	401	123
28	7.30	14.1	459	1.67	608.8	102.4	5.95	0.28	3.57	10029827	365	343	106
29	7.29	14.2	436	1.60	614.0	100.7	6.10	0.26	3.54	10029827	384	266	81
30	7.28	14.1	421	1.46	579.8	99.6	5.82	0.25	3.53	10029827	397	230	70
Averages	7.26	16.66	643	1.47	395.5	83.4	4.71	0.32	3.73	10029827	268.1	490.78	158.60

#### 5.0 ULTRAVIOLET DISINFECTION

Average monthly chlorine residual before UV Treatment was 1.62 mg/L The average monthly chlorine residual after UV treatment and re-chlorination was 1.55 mg/L.

Figure 5.1 - UV Disinfection - BMID Mission Creek Source - September 2025

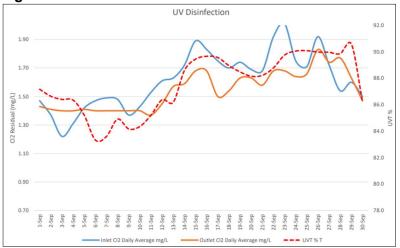


Table 5.2 - UV Disinfection Table - Mission Creek Source

	Inlet CI2	Outlet CI2					In Spec Water	Off Spec	Off Spec %
	Daily	Daily	UV	Т	Turbidity		Volume	Water	of Water
Date	mg/L	mg/L	%	Т	NTU		Cubic Meters	Cubic Meters	Percentage
1-Sep	1.47	1.43	8	7.2	0.50		52,847	0	0.00%
2-Sep	1.37	1.41	8	6.6	0.51		58,774	0	0.00%
3-Sep	1.22	1.40	8	6.4	0.53		61,097	0	0.00%
4-Sep	1.31	1.40	8	6.3	0.51		61,136	0	0.00%
5-Sep	1.42	1.41	8	5.2	0.54		58,746	0	0.00%
6-Sep	1.47	1.40	8	3.3	0.53		50,737	0	0.00%
7-Sep	1.49	1.40	8	3.6	0.54		44,091	0	0.00%
8-Sep	1.48	1.40	8	4.9	0.52		37,979	0	0.00%
9-Sep	1.37	1.40	8	4.2	0.56		40,087	0	0.00%
10-Sep	1.43	1.40	8	4.4	0.55		39,252	0	0.00%
11-Sep	1.53	1.37	8	5.2	0.52		43,032	0	0.00%
12-Sep	1.61	1.45	8	6.4	0.50		48,508	0	0.00%
13-Sep	1.63	1.57	8	6.2	0.45		46,211	0	0.00%
14-Sep	1.72	1.59	8	8.6	0.46		42,514	53	0.12%
15-Sep	1.89	1.68	8	9.4	0.41		43,713	3	0.01%
16-Sep	1.83	1.68	8	9.7	0.39		46,302	0	0.00%
17-Sep	1.75	1.50	8	9.6	0.39		48,655	0	0.00%
18-Sep	1.70	1.54	8	9.0	0.40		52,442	0	0.00%
19-Sep	1.74	1.63	8	8.5	0.40		46,187	60	0.13%
20-Sep	1.69	1.63	8	8.2	0.40		43,979	3	0.01%
21-Sep	1.68	1.58	8	8.2	0.39		35,662	0	0.00%
22-Sep	1.92	1.68		8.8	0.44		35,116	0	0.00%
23-Sep	2.01	1.68	8	9.8	0.42		43,226	0	0.00%
24-Sep	1.75	1.64	9	0.1	0.42		48,247	0	0.00%
25-Sep	1.71	1.66	9	0.1	0.43		42,918	0	0.00%
26-Sep	1.92	1.83	9	0.0	0.39		38,572	0	0.00%
27-Sep	1.72	1.74	9	0.0	0.38		36,658	0	0.00%
28-Sep	1.54	1.77	8	9.9	0.38		30,536	0	0.00%
29-Sep	1.60	1.63	9	0.6	0.37		23,776	0	0.00%
30-Sep	1.50	1.47		6.2	0.37		21,123	0	0.00%
Average	1.62	1.55	87	.54	0.45	Total	1,322,121.70	118.8	0.009%

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

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

	2921 B	elgo Rd	Boos	ster 1	Ellison E	Blow-Off	Ellison	School	3976 His	ghway 97	Prospect F	Reservoir	Tower Re	eservoir	Wel	II #5	Kirschn	er Res	Pearson	n 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
5-Aug-25	0	0	0	0							0	0			0	0	0	0	0	0
11-Aug-25			0	0	0	0	0	0	0	0			0	0	0	0				
20-Aug-25	0	0	0	0							0	0			0	0	0	0	0	0
25-Aug-25			0	0	0	0	0	0	0	0		177	0	0	0	0				
2-Sep-25	0	0	0	0							0	0			0	0	0	0	0	0
9-Sep-25	2		0	0	0	0	0	0	0	0			0	0	0	0	7.0			
15-Sep-25	0	0	0	0							0	0			0	0	0	0	0	0
23-Sep-25	_		0	0	0	0	0	0	0	0			0	0	0	0				
29-Sep-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 12 samples were found to be absent of both Total Coliforms and E.Coli.

Table 6.2 - BMID In-house Testing - Presence Absence

		9/2/2	025			9/9/2	2025			9/15/2	2025			9/23/	2025			9/29/	2025	
Location	CI2	Temp.	Pres.	Abs.	CI2	Temp.	Pres.	Abs.	CI2	Temp.	Pres.	Abs.	CI2	Temp.	Pres.	Abs.	CI2	Temp.	Pres.	Abs.
Sylvania Cres	0.47	21.8	-	X									1.14	22.7	-	X				
170 Kneller Rd	0.32	22.2	-	X	l								1.07	22.9	-	X	ı			
2105 Morrison					0.95	21.2	-	X									0.88	16.6	-	X
Staymen Rd					0.98	20.6	-	X									0.84	17.2	-	X
260 Campion Rd									0.06	21.2	-	X								
Fenwick Rd					l				0.23	21.8	-	X					ı			
Solly Ct	0.91	22.3	-	X									1.14	22.6	-	X				

## 7.0 WELL #6 POTENTIAL POTABILITY TESTING

## Table 7.1 - Well 6 Bacterial 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									
7-Jul-25	0	0									
28-Jul-25	0	0									
25-Aug-25	0	0									
29-Sep-25	0	0									