



MONTHLY REPORTING PERIOD - APRIL, 2024

SUMMARY

This document provides a summary of the water quality information collected by BMID in April 2024. Documentation and figures are provided on the following pages to support this submission.

WATER SUPPLY & USAGE SUMMARY

1. Water usage data for April, 2024 is as follows:

| Source | Total (US Gallons) | Total (Mega Litres) |
|--------------------------------|--------------------|---------------------|
| Mission Creek | 126,843,797 | 480.10 |
| Well 4 | 5,134,408 | 19.43 |
| Well 5 | 4,732,077 | 17.91 |
| Well 6 (Irrigation Only) | 0 | 0 |
| Scotty Creek (Irrigation Only) | 0 | 0 |
| Total | 136,710,283 | 517.45 |

2. The control gates for all of BMID's high-elevation reservoirs are closed for the season. The reservoirs will be opened after spring freshet 2024, to supplement flows in Mission Creek during the summer/fall;
3. BMID's Scotty Creek source supplying irrigation water to the north-end of the service area, was placed in stand-by mode on September 8th, 2023. The Scotty Creek source will remain in stand-by until irrigation demands increase in the summer of 2024;
4. Well #5, used as the primary water source in the north-end of the system for both irrigation and domestic consumption, resumed operations on April 22, 2024 as system flows increased for the spring. Well #5 will continue to operate until flows reduce in the fall of 2024;
5. Well #4, used as a primary source for domestic water in the north-end of the distribution system during low-flow periods, resumed operation on September 27th, 2023. Well #4 was in operation throughout April and will remain in service until the spring/summer of 2024;
6. Well #6, which supplies water to the north-end irrigation distribution system, was placed in stand-by mode on September 24th, 2023. Well #6 will resume operations in the summer of 2024;
7. A portion of the BMID's transmission main west of the Mission Creek Intake and east of the tunnel is located on an unstable slope. Slope movement continues to be monitored. It is currently stable and is not moving;

WATER QUALITY SUMMARY

1. Disinfection by-product (THM and HAA) testing took place on April 8th at five locations throughout the BMID service area. All five THM samples and four of the five HAA samples were found to be below the guideline for disinfection by-products as set out by the Guidelines for Canadian Drinking Water Quality. Both THM and HAA results were below the guideline for the quarterly average;
2. The WTP was in operation throughout April as Mission Creek experienced increased turbidity and colour in the raw water. The WTP will remain in operation until turbidity and colour levels in Mission Creek reduce in the late fall/early winter;
3. Raw water turbidity levels in Mission Creek peaked at 18.22 NTU on April 27th. Average daily raw water turbidity for April was 4.21 NTU at the Mission Creek Intake;
4. The highest turbidity level at the Distribution Intake (end of Hadden Reservoir) was 0.64 NTU on April 1st, 2024. Average settled water turbidity for April was 0.55 NTU at the Distribution Intake at the lower end of Hadden Reservoir;
5. The highest turbidity level at the first customer (Booster #1) was 0.71 NTU on April 12th. Average monthly turbidity at the first customer was 0.49 NTU;
6. Average daily turbidity at the UV station peaked at 0.99 NTU on April 10th. The turbidity meter reads consistently higher at this location, however, the turbidity results upstream and downstream of the UV plant have lower turbidity results. Average monthly turbidity at the UV disinfection station was 0.82 NTU;
7. BMID's Ultraviolet Treatment Facility treated 480,041.4 m³ of water, 114.7 m³ of which was Off-Spec (0.024%);
8. The Off-Spec water at the end of April resulted from a full power shutdown initiated by BMID staff. The shut-down resulted in one of the three reactors shutting down and forcing the next reactor to initialize. During this process, small volumes of Off-Spec water are recorded;
9. Regarding microbiological readings, BMID ceased withdrawing water from the upper elevation reservoirs earlier in the fall. Throughout the remainder of winter and early spring, Mission Creek is expected to have stable microbiological readings as freezing conditions continue in the watershed;
10. *E.Coli* levels at Mission Creek's Point-of-Diversion (creek intake prior to WTP) had normal counts for April. The April 6th sample had the peak monthly count of 15 coliforms. The average monthly *E.Coli* was 3, based on 5 samples;
11. *E.Coli* levels in the raw water at the water distribution system intake at the east end of Hadden Reservoir, immediately prior to disinfection, had zero counts on three of four samples. The fourth sample only had a single *E.Coli* count. Reduction in *E.Coli* levels is due to the effectiveness of the Water Treatment Plant as well as the settling of particles as water passes through Stevens and Hadden Reservoirs;
12. No *E.Coli* or *Total* Coliforms were found in treated water in the distribution system through third-party analysis. In addition, zero positive samples were detected by BMID's in-house presence/absence testing throughout April;

1.0 FLOWS - APRIL, 2024

The Maximum Daily Flow was on April 23rd, at 8,364,865 US gallons (31.66 ML)

The Minimum Daily Flow was on April 1st, at 2,789,893 US gallons (10.56 ML)

Mission Creek provided just under 93% of domestic flow supplied in April.

Figure 1.1 - Domestic Water System Flow

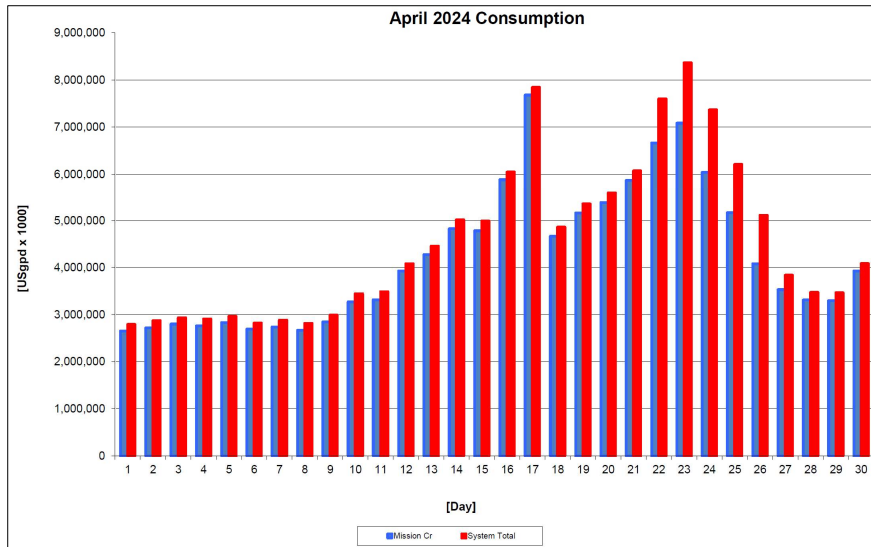


Table 1.2 - April 2024 - Daily Consumption Report

| Year | Mission Cr | Well #4 | Well #5 | System Total | System Total |
|--------------|-------------|-----------|-----------|--------------|--------------|
| 2024 | Usgpd | Usgpd | Usgpd | Usgpd | ML/Day |
| 1-Apr | 2,650,411 | 139,482 | 0 | 2,789,893 | 10.56 |
| 2-Apr | 2,717,775 | 151,634 | 0 | 2,869,409 | 10.86 |
| 3-Apr | 2,800,910 | 132,349 | 0 | 2,933,259 | 11.10 |
| 4-Apr | 2,760,412 | 148,992 | 0 | 2,909,404 | 11.01 |
| 5-Apr | 2,829,943 | 133,142 | 0 | 2,963,084 | 11.22 |
| 6-Apr | 2,693,551 | 128,387 | 0 | 2,821,937 | 10.68 |
| 7-Apr | 2,738,539 | 146,086 | 0 | 2,884,625 | 10.92 |
| 8-Apr | 2,667,239 | 146,086 | 0 | 2,813,325 | 10.65 |
| 9-Apr | 2,846,612 | 142,388 | 0 | 2,988,999 | 11.31 |
| 10-Apr | 3,271,374 | 170,654 | 0 | 3,442,028 | 13.03 |
| 11-Apr | 3,317,102 | 170,654 | 0 | 3,487,756 | 13.20 |
| 12-Apr | 3,926,732 | 155,860 | 0 | 4,082,592 | 15.45 |
| 13-Apr | 4,276,733 | 180,428 | 0 | 4,457,161 | 16.87 |
| 14-Apr | 4,823,728 | 190,467 | 0 | 5,014,194 | 18.98 |
| 15-Apr | 4,780,536 | 207,373 | 0 | 4,987,909 | 18.88 |
| 16-Apr | 5,886,307 | 162,200 | 0 | 6,048,507 | 22.89 |
| 17-Apr | 7,679,374 | 164,842 | 0 | 7,844,216 | 29.69 |
| 18-Apr | 4,666,519 | 190,467 | 0 | 4,856,986 | 18.38 |
| 19-Apr | 5,159,860 | 190,467 | 0 | 5,350,327 | 20.25 |
| 20-Apr | 5,380,391 | 204,996 | 0 | 5,585,387 | 21.14 |
| 21-Apr | 5,870,800 | 204,996 | 0 | 6,075,796 | 23.00 |
| 22-Apr | 6,662,207 | 197,863 | 738,091 | 7,598,161 | 28.76 |
| 23-Apr | 7,084,433 | 213,978 | 1,066,454 | 8,364,865 | 31.66 |
| 24-Apr | 6,042,116 | 227,979 | 1,096,570 | 7,366,664 | 27.88 |
| 25-Apr | 5,169,265 | 210,543 | 827,116 | 6,206,925 | 23.49 |
| 26-Apr | 4,076,914 | 183,334 | 848,514 | 5,108,762 | 19.34 |
| 27-Apr | 3,530,263 | 155,332 | 151,634 | 3,837,228 | 14.52 |
| 28-Apr | 3,309,494 | 163,257 | 0 | 3,472,751 | 13.14 |
| 29-Apr | 3,297,184 | 165,635 | 1,321 | 3,464,139 | 13.11 |
| 30-Apr | 3,927,075 | 154,539 | 2,378 | 4,083,992 | 15.46 |
| Totals Usgpd | 126,843,797 | 5,134,408 | 4,732,077 | 136,710,283 | 517.45 |
| Totals ML | 480.10 | 19.43 | 17.91 | | |
| Avg's | 4,228,127 | 16.00 | | 4,557,009 | 17.25 |
| Max | 7,679,374 | 29.07 | | 8,364,865 | 31.66 |
| Min | 2,650,411 | 10.03 | | 2,789,893 | 10.56 |

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 Distribution Intake's Point of Disinfection and at the Mission Creek raw water Point of Diversion and at Stevens Pond outlet (point halfway between WTP Outlet and Distribution Intake).

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

The control gates on BMID's high-elevation reservoirs were closed throughout April, making for a greater contribution of ground water to the overall flow of Mission Creek leading to reduced E.Coli levels in the raw water.

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

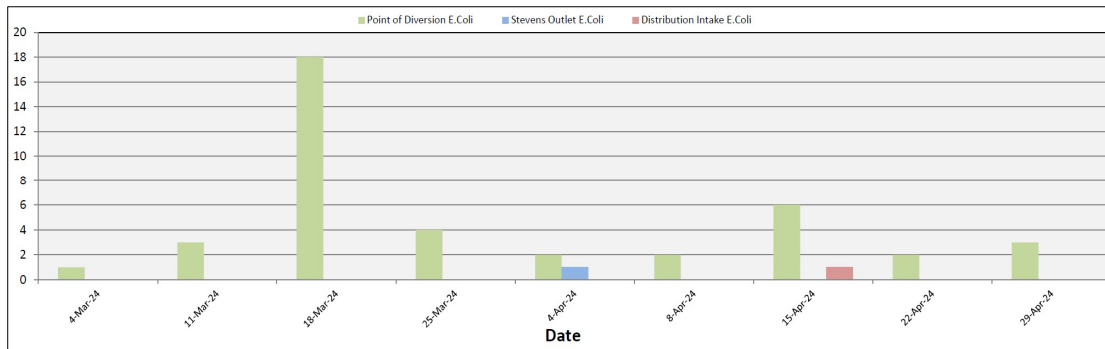


Table 2.1 - *E.Coli* Readings (CARO Labs)

| Date | Point of Diversion E.Coli | Stevens Outlet E.Coli | Distribution Intake E.Coli |
|-----------|------------------------------|--------------------------|-------------------------------|
| 4-Mar-24 | 1 | 0 | 0 |
| 11-Mar-24 | 3 | 0 | 0 |
| 18-Mar-24 | 18 | 0 | 0 |
| 25-Mar-24 | 4 | 0 | 0 |
| 4-Apr-24 | 2 | 1 | 0 |
| 8-Apr-24 | 2 | 0 | 0 |
| 15-Apr-24 | 6 | 0 | 1 |
| 22-Apr-24 | 2 | 0 | 0 |
| 29-Apr-24 | 3 | 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 m³ 1st upper balancing reservoir (Stevens Res.)

Hadden Outlet (Raw) - Sampling point after exiting 75,000 m³ 2nd lower balancing reservoir (Hadden Res.)
(Hadden Outlet = Distribution Intake - Point of Disinfection)

3.0 RAW AND TREATED WATER TURBIDITY

Through April 2024, turbidity for the Mission Creek source was measured at Booster Station No. 1 on Gallagher's Road, which is the approximate location of the first-customer. The highest turbidity level recorded at this location was 0.71 NTU on April 12th 2024. The lowest turbidity level was 0.26 NTU and the average turbidity was 0.49 NTU.

The distribution intake is where the water leaves Hadden Reservoir and enters a closed conduit. Turbidity levels are greatly reduced through the settling process as Mission Creek water makes its way through the reservoirs.

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

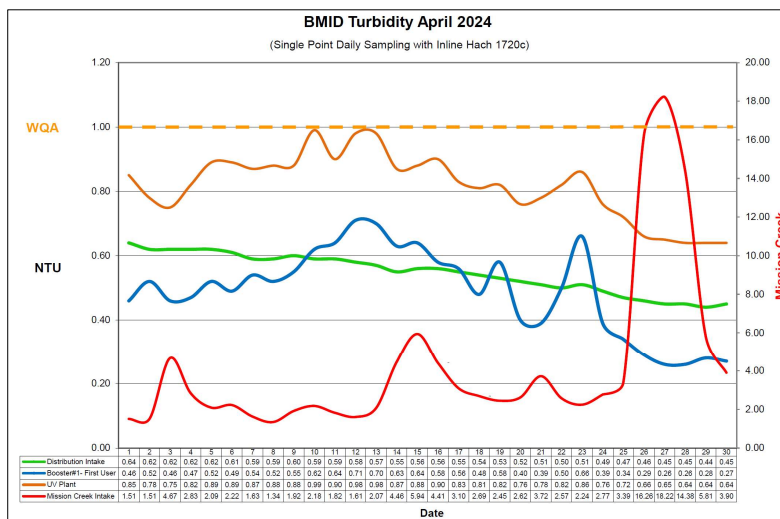


Table 3.1 - Daily Monitoring Record – Turbidity at On-Line Turbidity Analysers

| Turbidity Point Sampling for April 2024 | | | | |
|---|----------------------|---------------------|-----------------------|---------------------|
| 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 | 1.51 | 0.64 | 0.46 | 0.85 |
| 2 | 1.51 | 0.62 | 0.52 | 0.78 |
| 3 | 4.67 | 0.62 | 0.46 | 0.75 |
| 4 | 2.83 | 0.62 | 0.47 | 0.82 |
| 5 | 2.09 | 0.62 | 0.52 | 0.89 |
| 6 | 2.22 | 0.61 | 0.49 | 0.89 |
| 7 | 1.63 | 0.59 | 0.54 | 0.87 |
| 8 | 1.34 | 0.59 | 0.52 | 0.88 |
| 9 | 1.92 | 0.60 | 0.55 | 0.88 |
| 10 | 2.18 | 0.59 | 0.62 | 0.99 |
| 11 | 1.82 | 0.59 | 0.64 | 0.90 |
| 12 | 1.61 | 0.58 | 0.71 | 0.98 |
| 13 | 2.07 | 0.57 | 0.70 | 0.98 |
| 14 | 4.46 | 0.55 | 0.63 | 0.87 |
| 15 | 5.94 | 0.56 | 0.64 | 0.88 |
| 16 | 4.41 | 0.56 | 0.58 | 0.90 |
| 17 | 3.10 | 0.55 | 0.56 | 0.83 |
| 18 | 2.69 | 0.54 | 0.48 | 0.81 |
| 19 | 2.45 | 0.53 | 0.58 | 0.82 |
| 20 | 2.62 | 0.52 | 0.40 | 0.76 |
| 21 | 3.72 | 0.51 | 0.39 | 0.78 |
| 22 | 2.57 | 0.50 | 0.50 | 0.82 |
| 23 | 2.24 | 0.51 | 0.66 | 0.86 |
| 24 | 2.77 | 0.49 | 0.39 | 0.76 |
| 25 | 3.39 | 0.47 | 0.34 | 0.72 |
| 26 | 16.26 | 0.46 | 0.29 | 0.66 |
| 27 | 18.22 | 0.45 | 0.26 | 0.65 |
| 28 | 14.38 | 0.45 | 0.26 | 0.64 |
| 29 | 5.81 | 0.44 | 0.28 | 0.64 |
| 30 | 3.90 | 0.45 | 0.27 | 0.64 |
| AVG | 4.21 | 0.55 | 0.49 | 0.82 |

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 April, 2024.

Figure 4.1 - CT Trending – BMID Mission Creek Source – April 2024

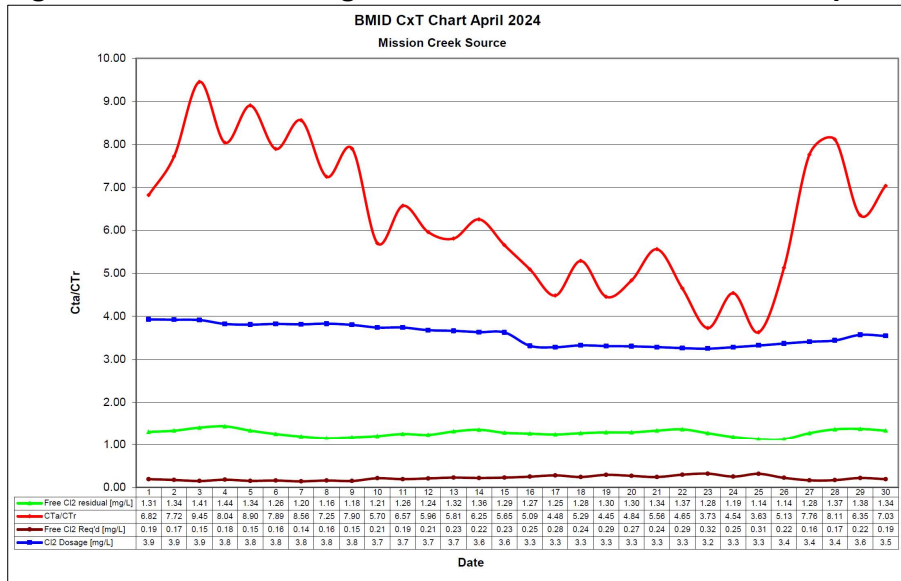


Table 4.2 - CT Table – Mission Creek Source

| BMID April 2024 | | | | | | | | | | | | | |
|----------------------|-----------|-----------|---------|----------|----------|-------|---------|----------|--------|---------|--------|---------------|------------|
| Mission Creek Source | | | | | | | | | | | | | |
| DATE | pH | TEMP | PEAK | Free Cl2 | CT | CT | CTa/CTr | Free Cl2 | Cl2 | VOLUME | TIME | FLOW | CL2 DOSAGE |
| | (Average) | (Present) | FLOW | residual | achieved | req'd | | Req'd | Dosage | TOTAL | | Daily Average | Average |
| April | | [°C] | [Usgpm] | [mg/L] | | | | [mg/L] | [mg/L] | [USgal] | [mins] | [USGPM] | [PPD] |
| 1 | 7.36 | 7.2 | 3,126 | 1.31 | 1110.5 | 162.9 | 6.82 | 0.19 | 3.9 | 2649600 | 848 | 1,873 | 88 |
| 2 | 7.36 | 8.0 | 2,974 | 1.34 | 1193.7 | 154.6 | 7.72 | 0.17 | 3.9 | 2649600 | 891 | 1,919 | 90 |
| 3 | 7.38 | 8.4 | 2,589 | 1.41 | 1442.9 | 152.6 | 9.45 | 0.15 | 3.9 | 2649600 | 1023 | 1,972 | 93 |
| 4 | 7.34 | 8.6 | 3,190 | 1.44 | 1196.1 | 148.8 | 8.04 | 0.18 | 3.8 | 2649600 | 831 | 1,955 | 90 |
| 5 | 7.34 | 8.6 | 2,709 | 1.34 | 1310.7 | 147.2 | 8.90 | 0.15 | 3.8 | 2649600 | 978 | 1,967 | 90 |
| 6 | 7.37 | 8.4 | 2,828 | 1.26 | 1180.3 | 149.5 | 7.89 | 0.16 | 3.8 | 2649600 | 937 | 1,902 | 87 |
| 7 | 7.35 | 8.4 | 2,521 | 1.20 | 1261.2 | 147.4 | 8.56 | 0.14 | 3.8 | 2649600 | 1051 | 1,940 | 89 |
| 8 | 7.34 | 8.5 | 2,924 | 1.16 | 1051.3 | 145.1 | 7.25 | 0.16 | 3.8 | 2649600 | 906 | 1,882 | 87 |
| 9 | 7.33 | 8.6 | 2,750 | 1.18 | 1136.9 | 143.9 | 7.90 | 0.15 | 3.8 | 2649600 | 963 | 2,008 | 92 |
| 10 | 7.33 | 8.2 | 3,787 | 1.21 | 846.5 | 148.5 | 5.70 | 0.21 | 3.7 | 2649600 | 700 | 2,297 | 103 |
| 11 | 7.32 | 8.8 | 3,558 | 1.26 | 938.4 | 142.8 | 6.57 | 0.19 | 3.7 | 2649600 | 745 | 2,342 | 105 |
| 12 | 7.31 | 9.1 | 3,967 | 1.24 | 828.3 | 139.0 | 5.96 | 0.21 | 3.7 | 2649600 | 668 | 2,774 | 123 |
| 13 | 7.31 | 9.3 | 4,350 | 1.32 | 804.0 | 138.4 | 5.81 | 0.23 | 3.7 | 2649600 | 609 | 3,015 | 133 |
| 14 | 7.30 | 9.7 | 4,276 | 1.36 | 842.6 | 134.7 | 6.25 | 0.22 | 3.6 | 2649600 | 620 | 3,399 | 148 |
| 15 | 7.28 | 10.4 | 4,784 | 1.29 | 714.5 | 126.4 | 5.65 | 0.23 | 3.6 | 2649600 | 554 | 3,373 | 147 |
| 16 | 7.26 | 10.1 | 5,172 | 1.27 | 650.6 | 127.8 | 5.09 | 0.25 | 3.3 | 2649600 | 512 | 3,238 | 129 |
| 17 | 7.31 | 10.2 | 5,728 | 1.25 | 578.2 | 129.0 | 4.48 | 0.28 | 3.3 | 2649600 | 463 | 3,340 | 132 |
| 18 | 7.28 | 9.7 | 4,839 | 1.28 | 700.8 | 132.5 | 5.29 | 0.24 | 3.3 | 2649600 | 548 | 3,297 | 132 |
| 19 | 7.26 | 9.4 | 5,744 | 1.30 | 599.6 | 134.6 | 4.45 | 0.29 | 3.3 | 2649600 | 461 | 3,646 | 145 |
| 20 | 7.25 | 9.7 | 5,422 | 1.30 | 635.3 | 131.4 | 4.84 | 0.27 | 3.3 | 2649600 | 489 | 3,801 | 151 |
| 21 | 7.23 | 10.4 | 5,117 | 1.34 | 693.8 | 124.8 | 5.56 | 0.24 | 3.3 | 2649600 | 518 | 4,146 | 164 |
| 22 | 7.22 | 10.0 | 6,088 | 1.37 | 596.2 | 128.2 | 4.65 | 0.29 | 3.3 | 2649600 | 435 | 4,709 | 185 |
| 23 | 7.21 | 10.4 | 6,879 | 1.28 | 458.4 | 123.0 | 3.73 | 0.32 | 3.2 | 2649600 | 385 | 5,029 | 196 |
| 24 | 7.20 | 10.3 | 5,452 | 1.19 | 554.0 | 122.0 | 4.54 | 0.25 | 3.3 | 2649600 | 486 | 4,279 | 169 |
| 25 | 7.20 | 10.6 | 7,010 | 1.14 | 430.9 | 118.8 | 3.63 | 0.31 | 3.3 | 2649600 | 378 | 3,653 | 146 |
| 26 | 7.17 | 10.7 | 5,050 | 1.14 | 598.1 | 116.6 | 5.13 | 0.22 | 3.4 | 2649600 | 525 | 2,887 | 117 |
| 27 | 7.18 | 11.1 | 3,772 | 1.28 | 899.2 | 115.9 | 7.76 | 0.16 | 3.4 | 2649600 | 702 | 2,495 | 102 |
| 28 | 7.17 | 10.7 | 3,732 | 1.37 | 972.7 | 119.9 | 8.11 | 0.17 | 3.4 | 2649600 | 710 | 2,343 | 97 |
| 29 | 7.17 | 10.6 | 4,767 | 1.38 | 767.0 | 120.9 | 6.35 | 0.22 | 3.6 | 2649600 | 556 | 2,327 | 100 |
| 30 | 7.15 | 10.7 | 4,256 | 1.34 | 834.2 | 118.6 | 7.03 | 0.19 | 3.5 | 2649600 | 623 | 2,786 | 119 |
| Averages | 7.28 | 9.5 | 4312 | 1.29 | 860.9 | 134.9 | 6.30 | 0.215 | 3.5659 | | 670 | 2,886 | 121.54 |

5.0 ULTRAVIOLET DISINFECTION

Total Water Treated: 480,156.1 m³ 100.00%
On-Spec Water: 480,041.4 m³ 99.974%
Off-Spec Water: 114.7 m³ 0.026%

Average monthly chlorine residual before UV Treatment was 1.45 mg/L
The average monthly chlorine residual after UV treatment and re-chlorination was 1.44 mg/L.

Figure 5.1 - UV Disinfection – BMID Mission Creek Source – April 2024

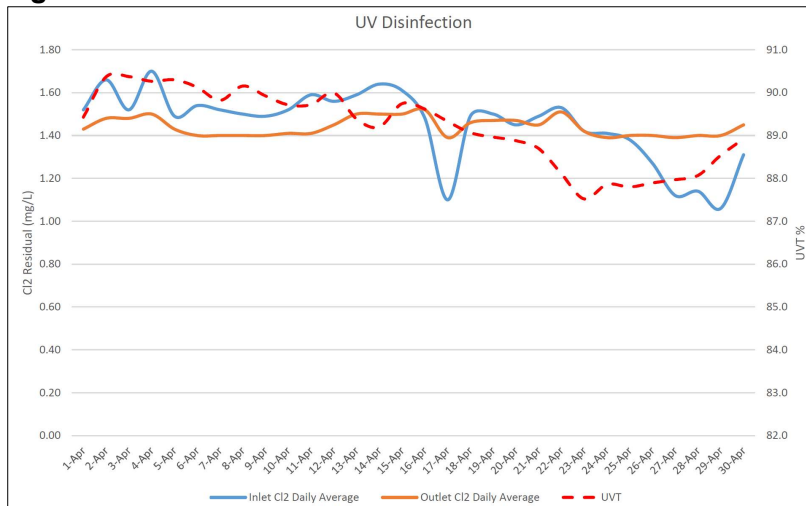


Table 5.2 - UV Disinfection Table – Mission Creek Source

| | Inlet Cl2 Daily | Outlet Cl2 Daily | UVT | Turbidity | In Spec Water Volume | Off Spec Water | Off Spec % of Water |
|---------|--------------------|---------------------|------|-----------|-------------------------|-------------------|------------------------|
| Date | mg/L | mg/L | % T | NTU | Cubic Meters | Cubic Meters | Percentage |
| 1-Apr | 1.52 | 1.43 | 89.4 | 0.85 | 10032.9 | 0 | 0.00% |
| 2-Apr | 1.66 | 1.48 | 90.4 | 0.78 | 10287.9 | 0 | 0.00% |
| 3-Apr | 1.52 | 1.48 | 90.4 | 0.75 | 10602.6 | 0 | 0.00% |
| 4-Apr | 1.70 | 1.50 | 90.3 | 0.82 | 10449.3 | 0 | 0.00% |
| 5-Apr | 1.49 | 1.43 | 90.3 | 0.89 | 10647.4 | 65.1 | 0.61% |
| 6-Apr | 1.54 | 1.40 | 90.1 | 0.89 | 10192.9 | 3.3 | 0.03% |
| 7-Apr | 1.52 | 1.40 | 89.8 | 0.87 | 10366.5 | 0 | 0.00% |
| 8-Apr | 1.50 | 1.40 | 90.2 | 0.88 | 10096.6 | 0 | 0.00% |
| 9-Apr | 1.49 | 1.40 | 89.9 | 0.88 | 10775.6 | 0 | 0.00% |
| 10-Apr | 1.52 | 1.41 | 89.7 | 0.99 | 12383.5 | 0 | 0.00% |
| 11-Apr | 1.59 | 1.41 | 89.7 | 0.90 | 12556.6 | 0 | 0.00% |
| 12-Apr | 1.56 | 1.45 | 90.0 | 0.98 | 14864.3 | 0 | 0.00% |
| 13-Apr | 1.59 | 1.50 | 89.4 | 0.98 | 16189.2 | 0 | 0.00% |
| 14-Apr | 1.64 | 1.50 | 89.2 | 0.87 | 18259.8 | 0 | 0.00% |
| 15-Apr | 1.61 | 1.50 | 89.7 | 0.88 | 18096.3 | 0 | 0.00% |
| 16-Apr | 1.48 | 1.52 | 89.6 | 0.90 | 22282.1 | 0 | 0.00% |
| 17-Apr | 1.10 | 1.39 | 89.3 | 0.83 | 29069.6 | 0 | 0.00% |
| 18-Apr | 1.49 | 1.46 | 89.1 | 0.81 | 17664.7 | 0 | 0.00% |
| 19-Apr | 1.50 | 1.47 | 89.0 | 0.82 | 19532.2 | 0 | 0.00% |
| 20-Apr | 1.45 | 1.47 | 88.9 | 0.76 | 20367.0 | 0 | 0.00% |
| 21-Apr | 1.49 | 1.45 | 88.7 | 0.78 | 22223.4 | 0 | 0.00% |
| 22-Apr | 1.53 | 1.51 | 88.1 | 0.82 | 25219.2 | 0 | 0.00% |
| 23-Apr | 1.42 | 1.42 | 87.5 | 0.86 | 26817.5 | 0 | 0.00% |
| 24-Apr | 1.41 | 1.39 | 87.9 | 0.76 | 22871.9 | 0 | 0.00% |
| 25-Apr | 1.38 | 1.40 | 87.8 | 0.72 | 19567.8 | 0 | 0.00% |
| 26-Apr | 1.27 | 1.40 | 87.9 | 0.66 | 15432.8 | 0 | 0.00% |
| 27-Apr | 1.12 | 1.39 | 88.0 | 0.65 | 13338.1 | 25.4 | 0.19% |
| 28-Apr | 1.14 | 1.40 | 88.1 | 0.64 | 12526.5 | 1.3 | 0.01% |
| 29-Apr | 1.06 | 1.40 | 88.5 | 0.64 | 12462.5 | 18.7 | 0.15% |
| 30-Apr | 1.31 | 1.45 | 88.9 | 0.64 | 14864.7 | 0.9 | 0.01% |
| Average | 1.45 | 1.44 | 89.2 | Total | 480041.4 | 114.7 | 0.024% |

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*

| Date | 2921 Belgo Rd | | Booster 1 | | Ellison Blow-Off | | Ellison 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 |
| 4-Mar-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11-Mar-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18-Mar-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25-Mar-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4-Apr-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-Apr-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15-Apr-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 22-Apr-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 29-Apr-24 | 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 11 samples were found to be absent of both *Total Coliforms* and *E. Coli*.

Table 6.2 - BMID In-house Testing – Presence Absence

| Location | 4/2/2024 | | | | 4/8/2024 | | | | 4/15/2024 | | | | 4/22/2024 | | | | 4/29/2024 | | | |
|----------------|----------|-------|-------|------|----------|-------|-------|------|-----------|-------|-------|------|-----------|-------|-------|------|-----------|-------|-------|------|
| | CI2 | Temp. | Pres. | Abs. | CI2 | Temp. | Pres. | Abs. | CI2 | Temp. | Pres. | Abs. | CI2 | Temp. | Pres. | Abs. | CI2 | Temp. | Pres. | Abs. |
| Sylvania Cres | | | | | | | | | 0.91 | 12.8 | - | X | | | | | | | | |
| 170 Kneller Rd | | | | | | | | | 0.91 | 13.8 | - | X | | | | | | | | |
| 2105 Morrison | 0.70 | 13.2 | - | X | | | | | | | | | 1.23 | 15.2 | - | X | 0.24 | 17.2 | - | X |
| Staymen Rd | 0.56 | 13.6 | - | X | | | | | | | | | 0.66 | 14.2 | - | X | 0.26 | 15.8 | - | X |
| 260 Campion Rd | | | | | 0.55 | 12.2 | - | X | | | | | | | | | | | | |
| Fenwick Rd | | | | | 0.78 | 11.6 | - | X | | | | | | | | | | | | |
| Solly Ct | | | | | | | | | 0.99 | 12.4 | - | X | | | | | | | | |

Table 6.3 - BMID Disinfection By-product Testing – THM and HAA

| 8-Apr-24 | | |
|---------------------|------------|---------------|
| Location | THM (mg/L) | HAA (mg/L) |
| Kirschner Reservoir | 0.0896 | 0.0951 |
| Pearson School | 0.0777 | 0.0737 |
| 2921 Belgo Rd | 0.0918 | 0.0845 |
| Ellison School* | 0.00611 | <0.00200 |
| 3976 Hwy 97 N | 0.0695 | 0.071 |

*Primarily Well Water Supply

- Both THM and HAA quarterly average results are within the limits as set out in the Guidelines for Canadian Drinking Water Quality
- BMID Population = 28,000

RECOMMENDED TESTS

- Recommended number of samples per month = 28
(as per Guide for Canadian Drinking Water Quality)

ACTUAL TESTS

- Total tests by BMID staff (presence/absence) = 11
- Total tests sampled by BMID and tested by Caro Labs 30
- Total tests sampled in BMID treated distribution system = 41
- 0 Positive *E. Coli* and Total Coliform Samples