

**CITY OF WEST KELOWNA**

# Monthly Water Quality Report



**Powers Creek Water Service Area**

**March 2025**

# WATER SUPPLY AND TREATMENT





# Powers Creek Water Treatment Plant

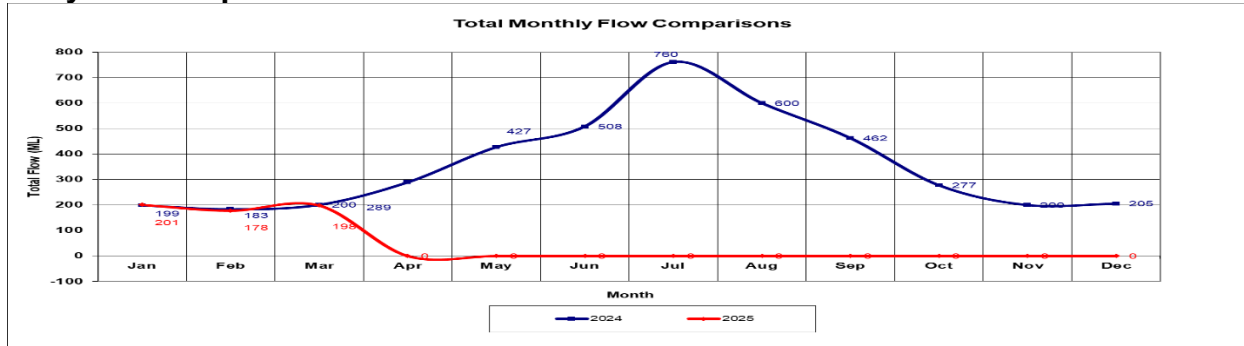
## Water Quality Summary

March 2025

### Flow Demand

|   |                        |
|---|------------------------|
| Total Flow                              | 198,365 M <sup>3</sup> |
| High Day, March 31 <sup>st</sup> , 2025 | 6,980 M <sup>3</sup>   |
| Low Day, March 16 <sup>th</sup> , 2025  | 6,031 M <sup>3</sup>   |

### Daily Consumption



| Date                                | Raw Water    | Filtered Water |          |           |               |             |        |
|-------------------------------------|--------------|----------------|----------|-----------|---------------|-------------|--------|
|                                     | Intake Total | Backwash Flow  | Flow to  | City Flow | Glenrosa Flow | Smith Creek |        |
| March 1, 2025                       | 7.0992       | 0.0000         | 7.5397   | 4.9013    | 1.6656        | 1.2379      | 0.0001 |
| March 2, 2025                       | 6.8017       | 0.0000         | 7.1623   | 4.8855    | 1.5664        | 1.1078      | 0.0001 |
| March 3, 2025                       | 7.3857       | 0.5976         | 6.6743   | 4.7013    | 1.7203        | 1.0845      | 0.0000 |
| March 4, 2025                       | 7.3262       | 0.3870         | 6.9109   | 4.6344    | 1.5295        | 1.0309      | 0.0000 |
| March 5, 2025                       | 7.3802       | 0.4793         | 6.9746   | 4.7277    | 1.5920        | 1.1037      | 0.0000 |
| March 6, 2025                       | 7.1667       | 0.2189         | 7.1686   | 4.6621    | 1.5759        | 1.0212      | 0.0000 |
| March 7, 2025                       | 7.1269       | 0.3823         | 6.9308   | 4.8244    | 1.5759        | 1.0814      | 0.0000 |
| March 8, 2025                       | 6.9377       | 0.0000         | 7.3558   | 4.7981    | 1.5926        | 1.0635      | 0.0000 |
| March 9, 2025                       | 6.9377       | 0.0000         | 6.8684   | 4.7981    | 1.6253        | 1.0635      | 0.0000 |
| March 10, 2025                      | 6.7958       | 0.0132         | 6.6654   | 4.9267    | 1.5877        | 1.1037      | 0.0000 |
| March 11, 2025                      | 7.2682       | 0.5510         | 7.3014   | 4.8180    | 1.5877        | 1.2172      | 0.0000 |
| March 12, 2025                      | 7.0663       | 0.1846         | 6.7805   | 4.6607    | 1.6040        | 1.0829      | 0.0000 |
| March 13, 2025                      | 7.0911       | 0.3912         | 6.6221   | 4.4160    | 1.6172        | 0.9545      | 0.0000 |
| March 14, 2025                      | 6.3789       | 0.0000         | 6.8807   | 4.4866    | 1.6172        | 1.0659      | 0.0000 |
| March 15, 2025                      | 7.1942       | 0.3982         | 6.5660   | 4.6284    | 1.6721        | 1.1603      | 0.0000 |
| March 16, 2025                      | 6.1734       | 0.0000         | 6.8632   | 4.3593    | 1.6721        | 0.9784      | 0.0000 |
| March 17, 2025                      | 6.5705       | 0.0000         | 6.6298   | 4.5517    | 1.5625        | 1.0759      | 0.0000 |
| March 18, 2025                      | 6.7304       | 0.3604         | 6.8378   | 4.4814    | 1.6434        | 1.0759      | 0.0000 |
| March 19, 2025                      | 6.4284       | 0.0000         | 6.6446   | 4.6248    | 1.5244        | 1.1553      | 0.0000 |
| March 20, 2025                      | 7.3673       | 0.5844         | 7.7811   | 4.4889    | 2.3055        | 1.0332      | 0.0000 |
| March 21, 2025                      | 7.4728       | 0.0000         | 6.9941   | 4.6116    | 1.5648        | 1.2285      | 0.0000 |
| March 22, 2025                      | 7.1981       | 0.4057         | 7.1055   | 4.7415    | 1.6047        | 1.0362      | 0.0000 |
| March 23, 2025                      | 6.6814       | 0.0000         | 7.2421   | 4.9038    | 1.7546        | 1.0433      | 0.0000 |
| March 24, 2025                      | 6.7169       | 0.0000         | 6.9579   | 4.8406    | 1.7170        | 1.0433      | 0.0000 |
| March 25, 2025                      | 7.5113       | 0.5350         | 6.7080   | 4.7703    | 1.5010        | 0.9548      | 0.0000 |
| March 26, 2025                      | 7.1405       | 0.3559         | 7.8082   | 4.9376    | 1.7154        | 1.2029      | 0.0000 |
| March 27, 2025                      | 8.2419       | 0.4692         | 6.8504   | 4.9328    | 1.6222        | 1.1131      | 0.0000 |
| March 28, 2025                      | 7.4035       | 0.8174         | 7.1436   | 4.9328    | 1.5978        | 1.1482      | 0.0000 |
| March 29, 2025                      | 8.9609       | 0.8666         | 7.8464   | 4.9205    | 1.8067        | 1.1220      | 0.0000 |
| March 30, 2025                      | 8.4723       | 0.4989         | 7.2242   | 4.9433    | 1.7531        | 1.0861      | 0.0000 |
| March 31, 2025                      | 7.5496       | 0.4057         | 7.1026   | 5.2272    | 1.7531        | 1.2792      | 0.0000 |
| <b>Daily Average (ML):</b>          | 7.1799       | 0.2872         | 7.0368   | 4.7464    | 1.6525        | 1.0953      | 0.0000 |
| <b>Monthly Totals (ML):</b>         | 222.5758     | 8.9026         | 218.1412 | 147.1376  | 51.2278       | 33.9564     |        |
| <b>Backwash Water (% of Total):</b> |              | 4.00%          |          |           |               |             |        |



# Powers Creek Water Treatment Plant

## Water Quality Summary

March 2025

### Chlorine

Chlorine used: **349.35 kg.**

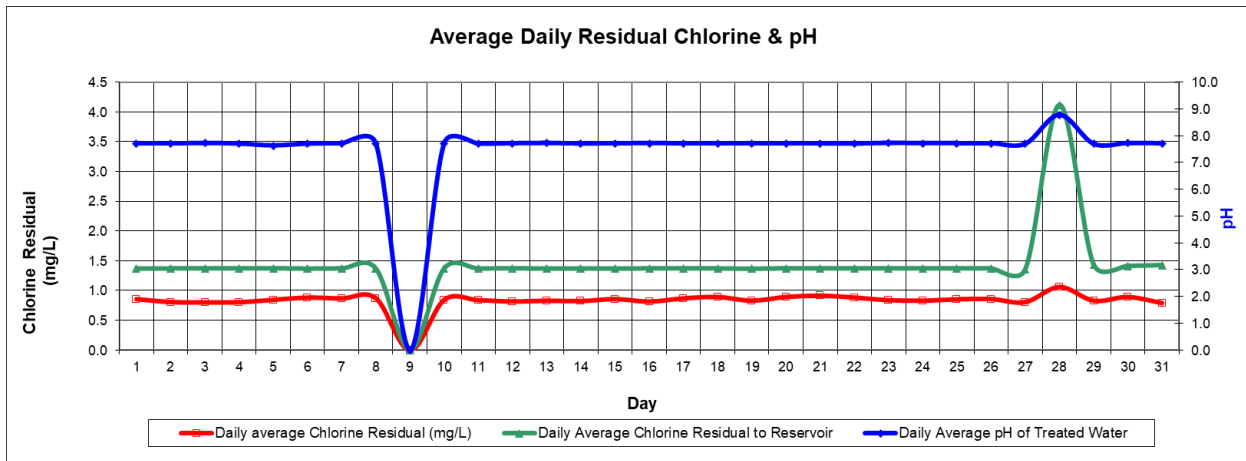
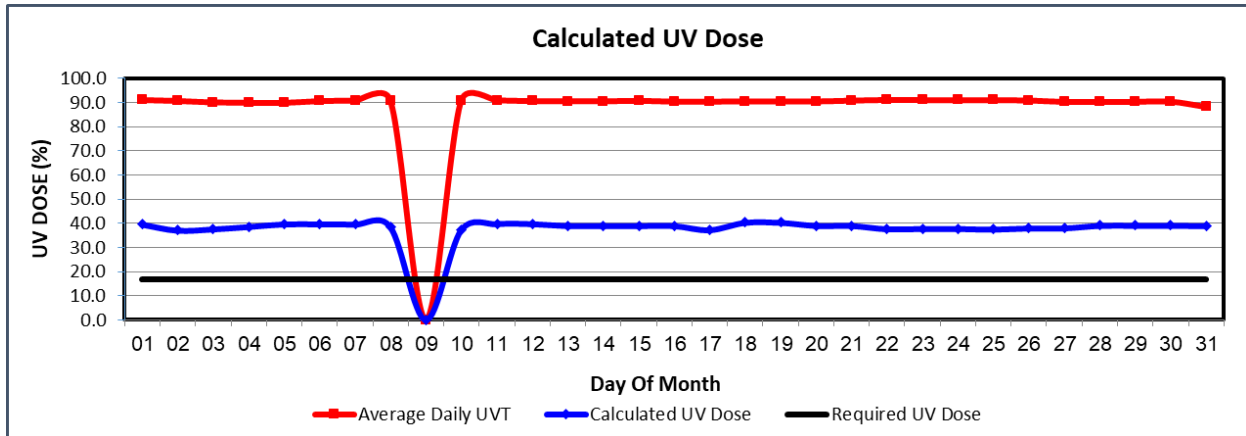
Average **11.27 kg/day**

### Free Chlorine Residual Range Leaving Reservoir

Maximum: **1.21 ppm**

Minimum: **0.73 ppm**

Average: **0.82 ppm**



### pH

High: **8.77**

Low: **7.63**

Average: **7.49**

### Raw Water Turbidity

High: **+20.00 NTU**

Low: **1.10 NTU**

Average: **4.73 NTU**



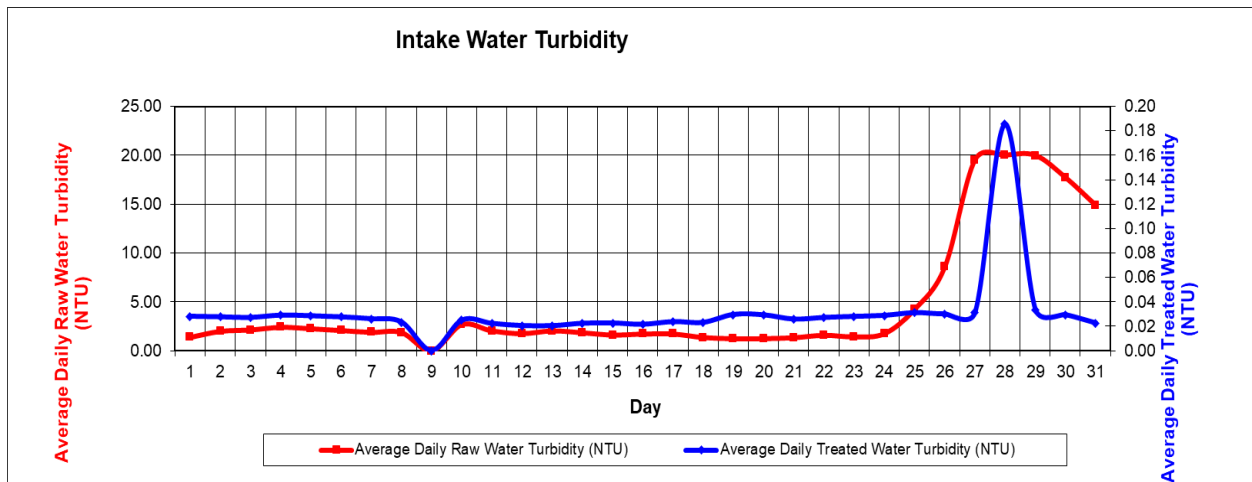
# Powers Creek Water Treatment Plant

## Water Quality Summary

March 2025

### Water Parameters

| Date                                       | Daily Raw Water Turbidity (NTU) |       |       | Daily Treated Water Turbidity (NTU)            |      |      | Cl2 Residual Into Reservoir (ppm)                       |      |      | Cl2 Residual Out of Reservoir (ppm)                       |      |      | pH                  |
|--|---------------------------------|-------|-------|--|------|------|---|------|------|---|------|------|---------------------|
|  | Min                             | Max   | Avg   | Min  | Max  | Avg  | Min   | Max  | Avg  | Min   | Max  | Avg  |                     |
| March 1, 2025                              | 1.10                            | 2.68  | 1.39  | 0.03   | 0.03 | 0.03 | 0.49  | 3.08 | 1.37 | 0.80  | 0.92 | 0.85 | 7.71                |
| March 2, 2025                              | 1.55                            | 4.05  | 2.00  | 0.03   | 0.03 | 0.03 | 0.70  | 2.95 | 1.37 | 0.77  | 0.89 | 0.81 | 7.71                |
| March 3, 2025                              | 1.96                            | 4.72  | 2.15  | 0.03   | 0.03 | 0.03 | 0.25  | 3.96 | 1.37 | 0.75  | 0.87 | 0.80 | 7.72                |
| March 4, 2025                              | 2.26                            | 4.04  | 2.42  | 0.03   | 0.03 | 0.03 | 0.35  | 3.25 | 1.37 | 0.74  | 0.89 | 0.80 | 7.70                |
| March 5, 2025                              | 2.17                            | 5.63  | 2.27  | 0.03   | 0.05 | 0.03 | 0.32  | 4.28 | 1.37 | 0.76  | 0.92 | 0.84 | 7.63                |
| March 6, 2025                              | 1.98                            | 4.61  | 2.09  | 0.03   | 0.03 | 0.03 | 0.42  | 3.51 | 1.37 | 0.81  | 1.10 | 0.88 | 7.70                |
| March 7, 2025                              | 1.80                            | 3.10  | 1.90  | 0.02   | 0.05 | 0.03 | 0.32  | 3.74 | 1.37 | 0.81  | 1.06 | 0.87 | 7.71                |
| March 8, 2025                              | 1.74                            | 3.09  | 1.88  | 0.02   | 0.05 | 0.02 | 0.81  | 2.91 | 1.37 | 0.82  | 1.05 | 0.87 | 7.71                |
| March 9, 2025                              | 1.81                            | 8.93  | 2.36  | 0.02   | 0.02 | 0.02 | 0.67  | 2.91 | 1.37 | 0.81  | 1.15 | 0.86 | 7.72                |
| March 10, 2025                             | 2.20                            | 5.34  | 2.70  | 0.02   | 0.08 | 0.02 | 0.01  | 3.43 | 1.37 | 0.78  | 1.09 | 0.84 | 7.71                |
| March 11, 2025                             | 1.83                            | 4.37  | 2.04  | 0.02   | 0.02 | 0.02 | 0.01  | 3.71 | 1.37 | 0.80  | 1.01 | 0.84 | 7.69                |
| March 12, 2025                             | 1.63                            | 2.92  | 1.77  | 0.02   | 0.05 | 0.02 | 0.29  | 5.79 | 1.37 | 0.76  | 0.99 | 0.81 | 7.71                |
| March 13, 2025                             | 1.73                            | 3.81  | 2.06  | 0.02   | 0.02 | 0.02 | 0.72  | 3.12 | 1.37 | 0.78  | 1.07 | 0.83 | 7.72                |
| March 14, 2025                             | 1.58                            | 3.26  | 1.86  | 0.02   | 0.02 | 0.02 | 0.03  | 3.74 | 1.37 | 0.76  | 1.03 | 0.82 | 7.70                |
| March 15, 2025                             | 1.52                            | 2.99  | 1.63  | 0.02   | 0.02 | 0.02 | 0.82  | 2.99 | 1.37 | 0.80  | 1.11 | 0.86 | 7.71                |
| March 16, 2025                             | 1.49                            | 4.19  | 1.73  | 0.02   | 0.02 | 0.02 | 0.76  | 2.89 | 1.37 | 0.77  | 1.02 | 0.81 | 7.72                |
| March 17, 2025                             | 1.45                            | 3.87  | 1.73  | 0.02   | 0.02 | 0.02 | 0.04  | 3.89 | 1.37 | 0.79  | 1.12 | 0.87 | 7.71                |
| March 18, 2025                             | 1.28                            | 2.41  | 1.38  | 0.02   | 0.02 | 0.02 | 0.60  | 3.11 | 1.37 | 0.82  | 1.21 | 0.89 | 7.71                |
| March 19, 2025                             | 1.11                            | 5.60  | 1.25  | 0.02   | 0.03 | 0.03 | 0.03  | 3.73 | 1.36 | 0.78  | 1.10 | 0.83 | 7.71                |
| March 20, 2025                             | 1.17                            | 3.36  | 1.26  | 0.03   | 0.03 | 0.03 | 0.51  | 2.88 | 1.37 | 0.83  | 0.98 | 0.89 | 7.71                |
| March 21, 2025                             | 1.21                            | 2.56  | 1.36  | 0.02   | 0.03 | 0.03 | 0.37  | 3.39 | 1.37 | 0.85  | 1.24 | 0.91 | 7.71                |
| March 22, 2025                             | 1.37                            | 3.16  | 1.60  | 0.03   | 0.03 | 0.03 | 0.80  | 2.88 | 1.37 | 0.83  | 1.08 | 0.88 | 7.70                |
| March 23, 2025                             | 1.35                            | 3.11  | 1.44  | 0.03   | 0.03 | 0.03 | 0.76  | 2.86 | 1.37 | 0.79  | 0.98 | 0.84 | 7.73                |
| March 24, 2025                             | 1.38                            | 3.79  | 1.77  | 0.03   | 0.03 | 0.03 | 0.34  | 4.36 | 1.37 | 0.79  | 0.99 | 0.83 | 7.71                |
| March 25, 2025                             | 2.20                            | 8.59  | 4.25  | 0.03   | 0.04 | 0.03 | 0.37  | 2.99 | 1.37 | 0.80  | 1.03 | 0.85 | 7.71                |
| March 26, 2025                             | 6.37                            | 16.27 | 8.58  | 0.03   | 0.03 | 0.03 | 0.12  | 4.74 | 1.37 | 0.82  | 1.03 | 0.86 | 7.71                |
| March 27, 2025                             | 15.90                           | 20.00 | 19.54 | 0.03   | 0.03 | 0.03 | 0.02  | 4.00 | 1.36 | 0.73  | 0.98 | 0.80 | 7.69                |
| March 28, 2025                             | 3.72                            | 20.00 | 20.00 | 0.03   | 0.19 | 0.19 | 0.03  | 4.12 | 4.12 | 0.77  | 1.06 | 1.06 | 8.77                |
| March 29, 2025                             | 3.72                            | 20.00 | 19.98 | 0.03   | 0.19 | 0.03 | 0.03  | 4.12 | 1.43 | 0.77  | 1.06 | 0.83 | 7.69                |
| March 30, 2025                             | 9.69                            | 20.00 | 17.71 | 0.03   | 0.03 | 0.03 | 0.24  | 3.16 | 1.41 | 0.82  | 1.02 | 0.89 | 7.72                |
| March 31, 2025                             | 8.65                            | 20.00 | 14.89 | 0.02   | 0.03 | 0.02 | 0.58  | 3.10 | 1.43 | 0.73  | 1.14 | 0.79 | 7.71                |
| <b>Raw Water Average Monthly Turbidity</b> |                                 |       |       | <b>Treated Water Average Monthly Turbidity</b> |      |      | <b>Average Monthly Chlorine Residual into Reservoir</b> |      |      | <b>Average Monthly Chlorine Residual out of Reservoir</b> |      |      | <b>Avg Month pH</b> |
| <b>4.73</b>                                |                                 |       |       | <b>0.03</b>                                    |      |      | <b>1.42</b>   |      |      | <b>0.82</b>   |      |      | <b>7.49</b>         |





# Powers Creek Water Treatment Plant

## Water Quality Summary

March 2025

### Finished Water Turbidity

High: **0.19 NTU**

Low: **0.02 NTU**

Average: **0.03 NTU**

### Chemical Usage

| Month | Totals | 7210A Total (L) | PACl Total (L) | Chlorine (Kg) | 7660A (L) | NaOH Total (L) |
|-------|--------|-----------------|----------------|---------------|-----------|----------------|
|       |        | 182.16          | 9,523.86       | 349.35        | 368.40    | 6,008.08       |

### Operational Highlights:

Demand for March was 198,365 **M<sup>3</sup>** compared to March 2024 demand of 199,793 **M<sup>3</sup>**

- **Regular and routine maintenance around PCWTP**

- Annual maintenance on DAF Saturator #2 – March 5<sup>th</sup>
- Semi-annual maintenance of Train #1 floc tanks & polymer system – March 10<sup>th</sup> – 12<sup>th</sup>
- Installed and rewired flash mix pump – March 11<sup>th</sup> – 13<sup>th</sup>
- Installed new streaming current analyzer, calibrated and running well – March 11<sup>th</sup> – 13<sup>th</sup>
- Seim-annual drain down and maintenance on residual DAF – March 13<sup>th</sup>
- HYDRO changed out power pole on intake road – March 18<sup>th</sup>
- New EV chargers installed by contractor - March 20<sup>th</sup>
- Re/re DAF #3 backwash header valve and gasket – March 17<sup>th</sup> – 25<sup>th</sup>
- Contractor in to weld DAF #3 header valve – March 20<sup>th</sup>
- Grading, packing and placement of concrete barriers on intake road – March 24<sup>th</sup> – 28<sup>th</sup>
- Spring freshette started - March 26<sup>th</sup>
- Changed desiccant in HACH NTU analyzer & DOC analyzer – March 28<sup>th</sup>
- Ongoing Hypo conversion work with Maple Reinders – all month

- **Powers Creek Watershed inspections and maintenance**

No Dam inspections done in March due to snow & ice

- Checked spillway at Dobbin Lake, Powers Creek Diversion & Jackpine lake – March 12<sup>th</sup>
- Snow course for Province done March 26<sup>th</sup> – Snow depth 110.5cm 112.67% of 44yr average & total water equivalent 324cm, 105.64% of 44yr average, for this time of year
- Lambly Lake – changed Fuel Cell March 12<sup>th</sup>
- Washout reported at 7lm mark on Bear Main Rd.

# WATER DISTRIBUTION



# Power's Creek Water Service Area – Distribution System Monitoring

March 2025

## Water Quality Data Review

- Based on the distribution system sample monitoring data it appears the water quality objectives were met for free chlorine residual, turbidity and bacteriological parameters for the month.
  - Bacteriological Samples:
    - 12 samples to CARO for analysis
    - 10 samples analyzed in-house at RWWTP
    - All bacteriological samples came back at <1 CFU/100mL for Total Coliforms and <1 CFU/100mL for *E.coli*
- March 7, 2025 – Smith Creek Pump Station (SCPS) online FCR analyzer was calibrated and increased by 0.22mg/L.
- March 21, 2025 – Glenrosa Reservoir (Res) online FCR analyzer was calibrated and decreased by 0.20mg/L.
- March 21, 2025 – Lateral One Pump Station online FCR analyzer was calibrated and was increased by 0.38mg/L.
- March 31, 2025 – SCPS online FCR analyzer was calibrated and was increased by 0.09mg/L.

## Operational System Improvements/Events

- March 4, 2025 – Brown/Dobbin Rd main repaired. After the initial repair Feb 1<sup>st</sup> at 2475 Dobbin Rd of the 2” service leak, it was identified that the AC pipe needed repair. This work was planned and completed on March 4<sup>th</sup>. All businesses were notified via individual contact and hand delivered notices in advance. After initial isolation attempt was not successful, the next closest isolation valve was closed affecting an additional 18 homes for approximately 4 hours (8pm to midnight).
- March 13, 2025 – Lateral One Pump Station online WQ analyzer was serviced, sensors were cleaned, new tubing installed, and O-rings replaced. All parameters verified by electrical and instrumentation technician (EIT).
- March 17, 2025 – SCPS acquired new graffiti to the building, no intrusion or other damage occurred.
- March 19, 2025 – Main strike by a contractor at 3310 Salmon Rd, repaired same day. A Boil Water Notice (BWN) was issued for 39 homes plus school and a WQA was issued for the majority of the Glenrosa area. Total of 23 homes and Helen Gorman Elementary School was without out of water for approximately 4 hours from 2pm to 6pm March 19<sup>th</sup> 2025.
  - Due to the loss of pressure in the water mains, bacteriological samples were collected and sent to CARO March 20<sup>th</sup> and 21<sup>st</sup> for the following locations and results indicated at less then 1CFU/100mL for Total Coliforms and E.coli:
    - 3431 Parklane Rd
    - Fire Hall #34
    - Glenrosa Reservoir
    - 3230 Stonegate Crt

- 3267 Gates Rd
- Helen Gorman School
- Additional bacteriological samples were taken March 24<sup>th</sup> and 25<sup>th</sup> at the hydrant on Oriole Dr and at Helen Gorman Elementary School. All consecutive sample sets indicated less than 1 CFU/100mL for Total Coliforms and *E.coli* and the BWN was rescinded on March 27<sup>th</sup> in consultation with Interior Health.

## WQ Field Data and Online Data

### Sampling Location Table:

| Sample Name                    | Civic Address        | Pressure Zone | WQ Sampling Rationale  |
|--------------------------------|----------------------|---------------|--|
| <b>Lateral One PS</b>          | 3188 Shetler Dr      | 630           | 1 <sup>st</sup> Customer water quality check.  |
| <b>Glenrosa PS</b>             | 3149 Coventry Cres   | 673           | Mid system water quality check. Water quality distributed throughout Glenrosa area.                          |
| <b>Glenrosa Res</b>            | 3313 Glenrosa Rd     | 673           | Mid system water quality check on reservoir. Re-chlorination occurring at this location.                     |
| <b>Smith Creek PS &amp;Res</b> | 2802 Smith Creek Rd  | 630           | Mid system water quality check. Water quality distributed throughout Smith Creek and downtown Westbank area. |
| <b>Dixie Res</b>               | 2850 Dixie Rd        | 630           | Mid system water quality check.  |
| <b>End-of-Line WQS</b>         | 4119 Gellatly Rd     | 449           | End system water quality check.  |
| <b>Mclver SS</b>               | 3036 Mclver Rd       | 626           | Mid system water quality check.  |
| <b>Bulk Water Stn</b>          | 3020 Shannon Lake Rd | 583           | End system water quality check. Water quality for bulk water filling and free water available to public.     |

- **PS** = Pump Station
- **SS**= Sample Station
- **Res** = Reservoir
- **WQS** = Water Quality Station

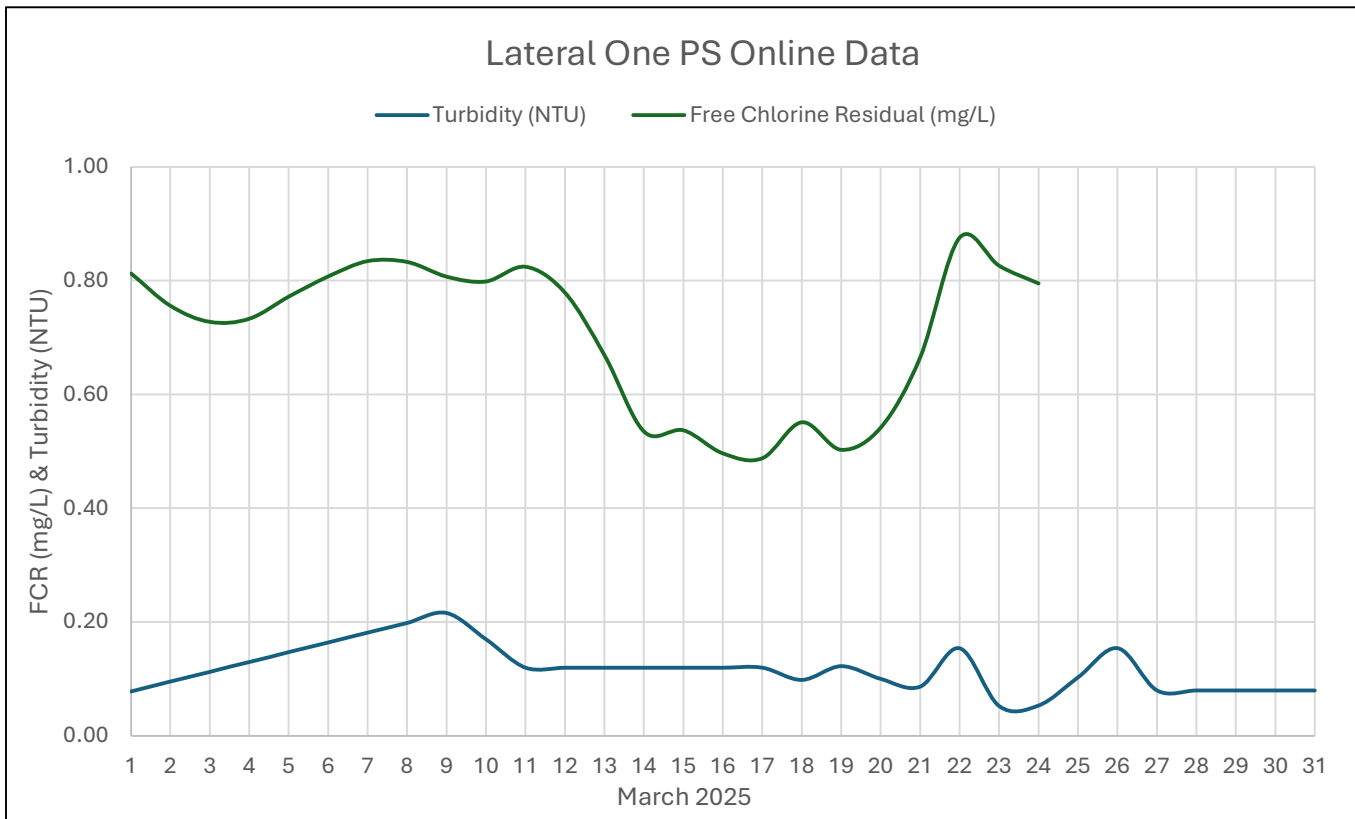
#### **Note:**

Water Quality (WQ) Field Data results reflect that of the noted location within the distribution system at the time of the grab sample collection.

# Lateral One PS

| Lateral One PS Online Data |             |              |                          |               |                      |            |            |
|----------------------------|-------------|--------------|--------------------------|---------------|----------------------|------------|------------|
| Date                       | L1 Water PH | L1 Turbidity | L1 Turbidity (Peak 1 Hr) | L1 Water Temp | L1 Chlorine Residual |            |            |
|                            | Avg (pH)    | Avg (NTU)    | Max Based On 1 Hr Avg    | Avg (°C)      | Min (mg/L)           | Max (mg/L) | Avg (mg/L) |
| <b>March</b>               |             |              |                          |               |                      |            |            |
| 1                          | 7.94        | 0.08         | 0.09                     | 4.68          | 0.75                 | 0.90       | 0.81       |
| 2                          | 7.93        | 0.10         | 0.11                     | 4.70          | 0.68                 | 0.81       | 0.76       |
| 3                          | 8.00        | 0.11         | 0.13                     | 4.78          | 0.67                 | 0.79       | 0.73       |
| 4                          | 7.94        | 0.13         | 0.15                     | 4.87          | 0.68                 | 0.79       | 0.73       |
| 5                          | 7.93        | 0.15         | 0.16                     | 4.82          | 0.68                 | 0.83       | 0.77       |
| 6                          | 7.94        | 0.16         | 0.18                     | 5.04          | 0.74                 | 0.87       | 0.81       |
| 7                          | 7.98        | 0.18         | 0.20                     | 5.10          | 0.74                 | 0.98       | 0.83       |
| 8                          | 7.96        | 0.20         | 0.22                     | 5.20          | 0.76                 | 0.90       | 0.83       |
| 9                          | 8.08        | 0.22         | 0.23                     | 5.30          | 0.61                 | 0.88       | 0.81       |
| 10                         | 8.01        | 0.17         | 0.24                     | 5.36          | 0.62                 | 0.87       | 0.80       |
| 11                         | 7.97        | 0.12         | 0.12                     | 6.75          | 0.76                 | 0.87       | 0.82       |
| 12                         | 7.99        | 0.12         | 0.12                     | 7.16          | 0.72                 | 0.82       | 0.78       |
| 13                         | 8.13        | 0.12         | 0.12                     | 7.86          | 0.49                 | 0.82       | 0.67       |
| 14                         | 8.36        | 0.12         | 0.12                     | 8.70          | 0.48                 | 0.58       | 0.53       |
| 15                         | 8.36        | 0.12         | 0.12                     | 8.81          | 0.48                 | 0.60       | 0.54       |
| 16                         | 8.31        | 0.12         | 0.12                     | 8.64          | 0.45                 | 0.54       | 0.50       |
| 17                         | 8.34        | 0.12         | 0.12                     | 8.63          | 0.41                 | 0.54       | 0.49       |
| 18                         | 8.32        | 0.10         | 0.16                     | 6.87          | 0.49                 | 0.76       | 0.55       |
| 19                         | 8.31        | 0.12         | 0.19                     | 6.00          | 0.38                 | 0.59       | 0.50       |
| 20                         | 8.29        | 0.10         | 0.21                     | 5.89          | 0.44                 | 0.65       | 0.54       |
| 21                         | 8.33        | 0.09         | 0.22                     | 6.15          | 0.49                 | 1.00       | 0.67       |
| 22                         | 8.33        | 0.15         | 0.25                     | 6.71          | 0.77                 | 1.09       | 0.88       |
| 23                         | 8.31        | 0.05         | 0.15                     | 6.81          | 0.73                 | 1.07       | 0.83       |
| 24                         | 8.29        | 0.05         | 0.10                     | 6.90          | 0.71                 | 0.98       | 0.80       |
| 25                         | 8.30        | 0.10         | 0.16                     | 6.92          | 0.72                 |            |            |
| 26                         | 8.33        | 0.15         | 0.21                     | 6.90          | 0.71                 | 0.98       | 0.81       |
| 27                         | 8.30        | 0.08         | 0.08                     | 7.29          | 0.61                 | 0.95       | 0.72       |
| 28                         | 8.28        | 0.08         | 0.08                     | 7.50          | 0.57                 |            |            |
| 29                         | 8.30        | 0.08         | 0.08                     | 7.13          | 0.63                 | 0.95       | 0.76       |
| 30                         | 8.42        | 0.08         | 0.08                     | 11.55         | 0.54                 |            |            |
| 31                         | 8.37        | 0.08         | 0.08                     | 11.03         | 0.49                 |            |            |
| <b>Average</b>             | 8.18        | 0.12         | 0.15                     | 6.78          | 0.61                 | 0.83       | 0.71       |
| <b>Min</b>                 | 7.93        | 0.05         | 0.08                     | 4.68          | 0.38                 | 0.54       | 0.49       |
| <b>Max</b>                 | 8.42        | 0.22         | 0.25                     | 11.55         | 0.77                 | 1.09       | 0.88       |

| Lateral One PS Field Data |            |              |            |                        |               |      |
|---------------------------|------------|--------------|------------|------------------------|---------------|------|
| Date                      | Turbidity  |              | Water Temp | Free Chlorine Residual |               | pH   |
|                           | Grab (NTU) | Online (NTU) | Grab (°C)  | Grab (mg/L)            | Online (mg/L) |      |
| 03-Mar-25                 | 0.07       | 0.08         | 3.90       | 0.68                   | 0.77          | 8.38 |
| 05-Mar-25                 | 0.14       | 0.08         | 5.00       | 0.91                   | 0.79          | 7.50 |
| 07-Mar-25                 | 0.07       | 0.08         | 4.20       | 0.82                   | 0.86          | 7.85 |
| 10-Mar-25                 | 0.07       | 0.13         | 5.60       | 0.73                   | 0.75          | 8.38 |
| 12-Mar-25                 | 0.12       | 0.08         | 7.30       | 0.62                   | 0.81          | 7.64 |
| 14-Mar-25                 | 0.10       | 0.08         | 8.20       | 0.55                   | 0.58          | 8.31 |
| 17-Mar-25                 | 0.15       | 0.09         | 8.70       | 0.75                   | 0.52          | 7.77 |
| 19-Mar-25                 | 0.14       | 0.07         | 5.00       | 0.80                   | 0.57          | 7.75 |
| 21-Mar-25                 | 0.11       | 0.07         | 5.70       | 0.90                   | 0.91          | 7.90 |
| 25-Mar-25                 | 0.11       |              | 6.00       | 0.83                   |               | 7.77 |
| <b>Average</b>            | 0.11       | 0.08         | 5.96       | 0.76                   | 0.73          | 7.93 |
| <b>Min</b>                | 0.07       | 0.07         | 3.90       | 0.55                   | 0.52          | 7.50 |
| <b>Max</b>                | 0.15       | 0.13         | 8.70       | 0.91                   | 0.91          | 8.38 |

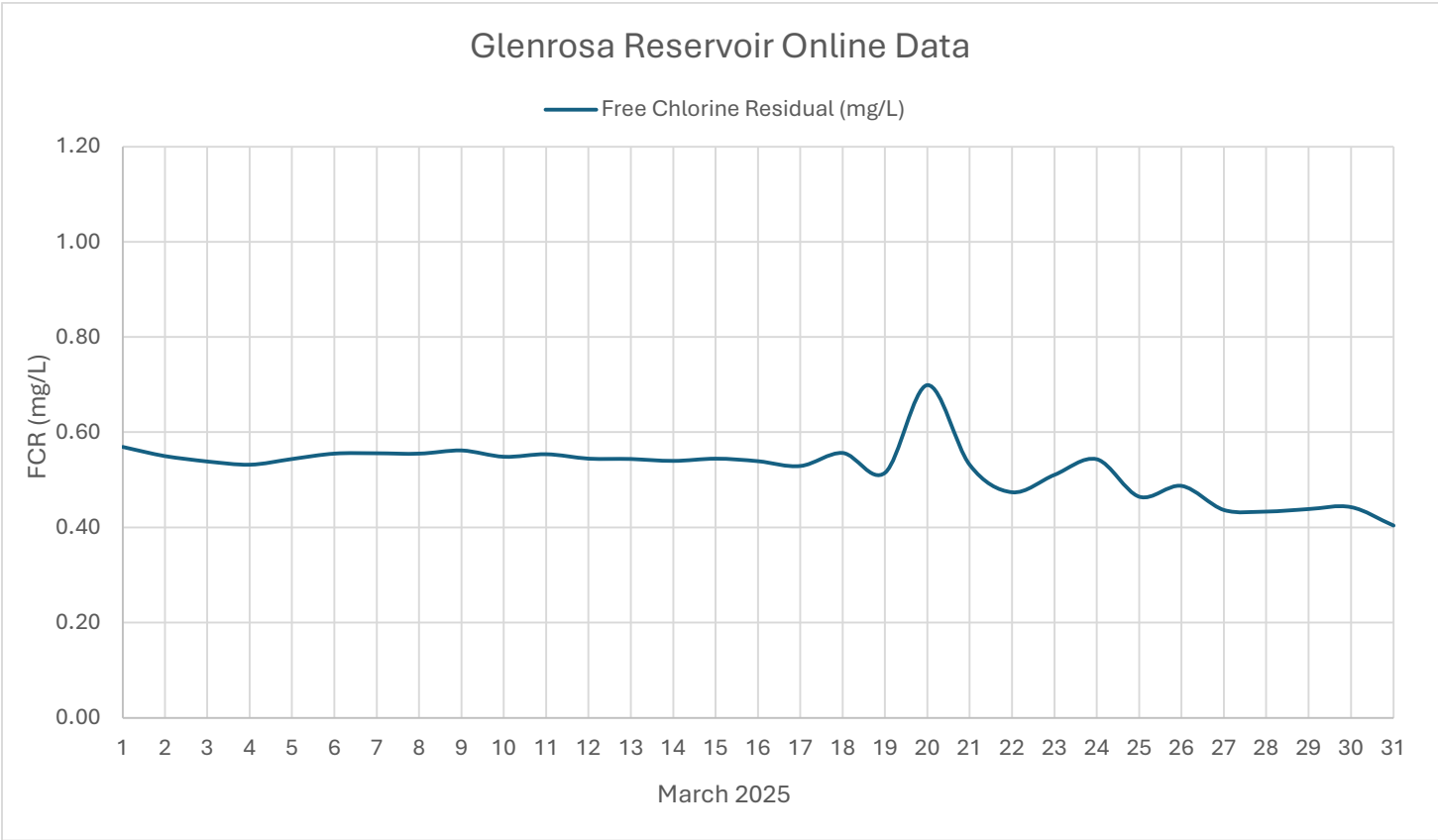


**Note:** March 25<sup>th</sup> - Lateral One PS FCR analyzer experienced temporary failure and was returned to service once repaired.

# Glenrosa PS & Reservoir

| Glenrosa Pump Station & Reservoir Online Data |                    |                   |                    |                      |                   |            |            |
|---|--------------------|-------------------|--------------------|----------------------|-------------------|------------|------------|
| Date  | Flow Total From PS | Peak Flow From PS | Reservoir Water pH | Reservoir Water Temp | Chlorine Residual |            |            |
|   | (ML)               | Max (ML/Day)      | Avg (pH)           | Avg (°C)             | Min (mg/L)        | Max (mg/L) | Avg (mg/L) |
| <b>March</b>                                  |                    |                   |                    |                      |                   |            |            |
| 1   | 1.62               | 5.04              | 7.94               | 2.73                 | 0.49              | 0.88       | 0.57       |
| 2   | 1.61               | 5.04              | 7.95               | 2.83                 | 0.47              | 0.94       | 0.55       |
| 3   | 1.72               | 5.04              | 7.96               | 2.94                 | 0.46              | 0.90       | 0.54       |
| 4   | 1.52               | 5.03              | 7.97               | 3.04                 | 0.45              | 0.94       | 0.53       |
| 5   | 1.59               | 4.39              | 7.96               | 3.14                 | 0.44              | 0.89       | 0.54       |
| 6   | 1.57               | 4.39              | 7.99               | 3.25                 | 0.44              | 1.13       | 0.56       |
| 7   | 1.57               | 4.38              | 8.00               | 3.35                 | 0.44              | 1.06       | 0.56       |
| 8   | 1.59               | 4.39              | 8.01               | 3.44                 | 0.43              | 1.11       | 0.56       |
| 9   | 1.62               | 4.39              | 8.01               | 3.55                 | 0.43              | 1.14       | 0.56       |
| 10  | 1.58               | 4.38              | 8.02               | 3.69                 | 0.43              | 1.13       | 0.55       |
| 11  | 1.58               | 4.39              | 8.02               | 3.78                 | 0.42              | 1.03       | 0.55       |
| 12  | 1.60               | 4.15              | 8.05               | 3.80                 | 0.41              | 1.13       | 0.54       |
| 13  | 1.62               | 4.12              | 8.06               | 3.80                 | 0.41              | 1.13       | 0.54       |
| 14  | 1.61               | 4.12              | 8.06               | 3.79                 | 0.41              | 1.07       | 0.54       |
| 15  | 1.66               | 4.14              | 8.05               | 3.80                 | 0.40              | 1.17       | 0.54       |
| 16  | 1.63               | 4.11              | 8.06               | 3.77                 | 0.40              | 1.05       | 0.54       |
| 17  | 1.55               | 4.15              | 8.05               | 3.75                 | 0.40              | 0.98       | 0.53       |
| 18  | 1.67               | 4.41              | 8.05               | 3.80                 | 0.39              | 1.03       | 0.56       |
| 19  | 1.48               | 4.63              | 8.06               | 3.85                 | 0.33              | 1.09       | 0.52       |
| 20  | 2.33               | 4.44              | 8.00               | 3.81                 | 0.47              | 1.03       | 0.70       |
| 21  | 1.56               | 4.43              | 8.05               | 3.91                 | 0.37              | 1.22       | 0.53       |
| 22  | 1.60               | 4.48              | 8.03               | 4.07                 | 0.37              | 0.89       | 0.47       |
| 23  | 1.67               | 4.43              | 8.03               | 4.22                 | 0.37              | 0.88       | 0.51       |
| 24  | 3.46               | 4.40              | 8.04               | 4.29                 | 0.39              | 0.93       | 0.54       |
| 25  | 1.50               | 5.04              | 8.04               | 4.33                 | 0.39              | 0.87       | 0.46       |
| 26  | 1.71               | 5.05              | 8.04               | 4.51                 | 0.38              | 0.96       | 0.49       |
| 27  | 1.62               | 5.06              | 8.03               | 4.68                 | 0.36              | 0.77       | 0.44       |
| 28  | 1.59               | 5.03              | 8.03               | 4.83                 | 0.34              | 0.81       | 0.43       |
| 29  | 3.39               | 5.04              | 8.03               | 4.91                 | 0.34              | 0.94       | 0.44       |
| 30  | 1.74               | 5.05              | 8.06               | 4.99                 | 0.33              | 1.43       | 0.44       |
| 31  | 1.71               | 5.04              | 8.04               | 5.10                 | 0.32              | 0.89       | 0.40       |
| <b>Average</b>                                | 1.75               | 4.59              | 8.02               | 3.86                 | 0.40              | 1.01       | 0.52       |
| <b>Min</b>                                    | 1.48               | 4.11              | 7.94               | 2.73                 | 0.32              | 0.77       | 0.40       |
| <b>Max</b>                                    | 3.46               | 5.06              | 8.06               | 5.10                 | 0.49              | 1.43       | 0.70       |

| Glenrosa Res Field Data |            |            |                        |               |      |
|-------------------------|------------|------------|------------------------|---------------|------|
| Date                    | Turbidity  | Water Temp | Free Chlorine Residual |               | pH   |
|                         | Grab (NTU) | Grab (°C)  | Grab (mg/L)            | Online (mg/L) |      |
| 05-Mar-25               | 0.35       | 3.30       | 0.78                   | 0.87          | 7.46 |
| 07-Mar-25               | 0.17       | 5.50       | 0.40                   | 0.39          | 7.87 |
| 12-Mar-25               | 0.19       | 3.80       | 0.38                   | 0.42          | 7.72 |
| 14-Mar-25               | 0.26       | 3.80       | 0.81                   | 0.87          | 7.77 |
| 17-Mar-25               | 0.14       | 3.80       | 0.50                   | 0.43          | 8.05 |
| 19-Mar-25               | 0.14       | 3.80       | 0.72                   | 0.87          | 7.81 |
| 21-Mar-25               | 0.11       | 4.40       | 0.90                   | 0.88          | 8.52 |
| <b>Average</b>          | 0.19       | 4.06       | 0.64                   | 0.68          | 7.89 |
| <b>Min</b>              | 0.11       | 3.30       | 0.38                   | 0.39          | 7.46 |
| <b>Max</b>              | 0.35       | 5.50       | 0.90                   | 0.88          | 8.52 |



# Smith Creek Reservoir, Dixie Reservoir & End-of-Line WQS

| Date           | Smith Creek Reservoir FCR Online Data |            |            | Dixie Reservoir FCR Online Data |            |            | End-of-The Line FCR Online Data |            |            |
|----------------|---------------------------------------|------------|------------|---------------------------------|------------|------------|---------------------------------|------------|------------|
|                | Min (mg/L)                            | Max (mg/L) | Avg (mg/L) | Min (mg/L)                      | Max (mg/L) | Avg (mg/L) | Min (mg/L)                      | Max (mg/L) | Avg (mg/L) |
| <b>March</b>   |                                       |            |            |                                 |            |            |                                 |            |            |
| 1              | 0.25                                  | 0.30       | 0.27       | 0.48                            | 0.55       | 0.52       | 0.54                            | 0.56       | 0.55       |
| 2              | 0.23                                  | 0.26       | 0.24       | 0.52                            | 0.54       | 0.53       | 0.53                            | 0.56       | 0.55       |
| 3              | 0.26                                  | 0.36       | 0.31       | 0.49                            | 0.53       | 0.51       | 0.48                            | 0.53       | 0.52       |
| 4              | 0.35                                  | 0.39       | 0.36       | 0.48                            | 0.51       | 0.49       | 0.46                            | 0.50       | 0.48       |
| 5              | 0.32                                  | 0.37       | 0.35       | 0.45                            | 0.50       | 0.47       | 0.45                            | 0.57       | 0.48       |
| 6              | 0.30                                  | 0.34       | 0.33       | 0.43                            | 0.46       | 0.45       | 0.45                            | 0.51       | 0.48       |
| 7              | 0.30                                  | 0.42       | 0.35       | 0.40                            | 0.44       | 0.42       | 0.50                            | 0.55       | 0.52       |
| 8              | 0.37                                  | 0.42       | 0.40       | 0.37                            | 0.41       | 0.40       | 0.52                            | 0.55       | 0.53       |
| 9              | 0.34                                  | 0.39       | 0.36       | 0.36                            | 0.39       | 0.38       | 0.53                            | 0.55       | 0.53       |
| 10             | 0.23                                  | 0.35       | 0.29       | 0.37                            | 0.44       | 0.42       | 0.51                            | 0.54       | 0.53       |
| 11             | 0.19                                  | 0.26       | 0.22       | 0.39                            | 0.42       | 0.40       | 0.49                            | 0.52       | 0.51       |
| 12             | 0.23                                  | 0.37       | 0.32       | 0.37                            | 0.39       | 0.39       | 0.49                            | 0.52       | 0.51       |
| 13             | 0.32                                  | 0.37       | 0.36       | 0.35                            | 0.39       | 0.37       | 0.47                            | 0.50       | 0.49       |
| 14             | 0.21                                  | 0.35       | 0.28       | 0.34                            | 0.40       | 0.37       | 0.47                            | 0.50       | 0.48       |
| 15             | 0.15                                  | 0.23       | 0.20       | 0.35                            | 0.39       | 0.37       | 0.48                            | 0.51       | 0.49       |
| 16             | 0.15                                  | 0.33       | 0.22       | 0.34                            | 0.35       | 0.35       | 0.51                            | 0.54       | 0.52       |
| 17             | 0.32                                  | 0.37       | 0.35       | 0.32                            | 0.35       | 0.33       | 0.48                            | 0.52       | 0.51       |
| 18             | 0.26                                  | 0.34       | 0.30       | 0.32                            | 0.35       | 0.32       | 0.48                            | 0.51       | 0.50       |
| 19             | 0.18                                  | 0.28       | 0.22       | 0.32                            | 0.35       | 0.33       | 0.50                            | 0.57       | 0.55       |
| 20             | 0.15                                  | 0.37       | 0.27       | 0.30                            | 0.41       | 0.36       | 0.51                            | 0.56       | 0.53       |
| 21             | 0.18                                  | 0.35       | 0.34       | 0.37                            | 0.39       | 0.38       | 0.50                            | 0.60       | 0.55       |
| 22             | 0.29                                  | 0.32       | 0.31       | 0.35                            | 0.39       | 0.37       | 0.59                            | 0.62       | 0.60       |
| 23             | 0.32                                  | 0.36       | 0.34       | 0.34                            | 0.37       | 0.35       | 0.58                            | 0.62       | 0.61       |
| 24             | 0.28                                  | 0.35       | 0.32       | 0.32                            | 0.35       | 0.33       | 0.55                            | 0.58       | 0.57       |
| 25             | 0.23                                  | 0.30       | 0.28       | 0.32                            | 0.34       | 0.33       | 0.52                            | 0.56       | 0.54       |
| 26             | 0.21                                  | 0.29       | 0.25       | 0.29                            | 0.36       | 0.32       | 0.56                            | 0.60       | 0.57       |
| 27             | 0.19                                  | 0.34       | 0.27       | 0.29                            | 0.37       | 0.33       | 0.57                            | 0.60       | 0.58       |
| 28             | 0.26                                  | 0.30       | 0.28       | 0.33                            | 0.35       | 0.34       | 0.47                            | 0.58       | 0.52       |
| 29             | 0.25                                  | 0.28       | 0.26       | 0.30                            | 0.34       | 0.32       | 0.45                            | 0.56       | 0.48       |
| 30             | 0.19                                  | 0.29       | 0.25       | 0.29                            | 0.33       | 0.32       | 0.50                            | 0.55       | 0.53       |
| 31             | 0.15                                  | 0.28       | 0.21       | 0.30                            | 0.33       | 0.31       | 0.36                            | 0.51       | 0.42       |
| <b>Average</b> | 0.25                                  | 0.33       | 0.29       | 0.36                            | 0.40       | 0.38       | 0.50                            | 0.55       | 0.52       |
| <b>Min</b>     | 0.15                                  | 0.23       | 0.20       | 0.29                            | 0.33       | 0.31       | 0.36                            | 0.50       | 0.42       |
| <b>Max</b>     | 0.37                                  | 0.42       | 0.40       | 0.52                            | 0.55       | 0.53       | 0.59                            | 0.62       | 0.61       |

| Smith Creek Res WQ Field Data |            |            |                        |      | Smith Creek PS WQ Field Data |             |               |                        |      |      |
|-------------------------------|------------|------------|------------------------|------|------------------------------|-------------|---------------|------------------------|------|------|
| Date                          | Turbidity  | Water Temp | Free Chlorine Residual | pH   | Date                         | Turbidity   | Water Temp    | Free Chlorine Residual |      | pH   |
|                               | Grab (NTU) | Grab (°C)  | Grab (mg/L)            |      |                              | Grab (mg/L) | Online (mg/L) |                        |      |      |
| 03-Mar-25                     | 0.55       | 4.90       | 0.51                   | 7.72 | 03-Mar-25                    | 0.16        | 6.80          | 0.54                   | 0.32 | 7.77 |
| 05-Mar-25                     | 0.25       | 3.20       | 0.45                   | 7.28 | 05-Mar-25                    | 0.24        | 7.00          | 0.48                   | 0.34 | 7.42 |
| 07-Mar-25                     | 0.21       | 3.20       | 0.40                   | 7.68 | 07-Mar-25                    | 0.30        | 7.30          | 0.41                   | 0.29 | 7.78 |
| 12-Mar-25                     | 0.15       | 3.60       | 0.29                   | 7.71 | 12-Mar-25                    | 0.16        | 7.50          | 0.32                   | 0.32 | 7.73 |
| 14-Mar-25                     | 0.15       | 5.00       | 0.39                   | 7.68 | 14-Mar-25                    | 0.17        | 6.50          | 0.22                   | 0.26 | 7.95 |
| 17-Mar-25                     | 0.16       | 4.40       | 0.37                   |      | 17-Mar-25                    | 0.16        | 7.80          | 0.41                   | 0.35 | 7.60 |
| 19-Mar-25                     | 0.25       | 4.50       | 0.29                   | 7.58 | 19-Mar-25                    | 0.19        | 7.30          | 0.28                   | 0.20 | 7.93 |
| 21-Mar-25                     | 0.23       | 4.20       | 0.35                   | 7.76 | 21-Mar-25                    | 0.21        | 7.50          | 0.39                   | 0.32 | 7.88 |
| Average                       | 0.24       | 4.13       | 0.38                   | 7.63 | Average                      | 0.20        | 7.21          | 0.38                   | 0.30 | 7.76 |
| Min                           | 0.15       | 3.20       | 0.29                   | 7.28 | Min                          | 0.16        | 6.50          | 0.22                   | 0.20 | 7.42 |
| Max                           | 0.55       | 5.00       | 0.51                   | 7.76 | Max                          | 0.30        | 7.80          | 0.54                   | 0.35 | 7.95 |

| Dixie Res WQ Field Data |            |            |                        |               |      |
|-------------------------|------------|------------|------------------------|---------------|------|
| Date                    | Turbidity  | Water Temp | Free Chlorine Residual |               | pH   |
|                         | Grab (NTU) | Grab (°C)  | Grab (mg/L)            | Online (mg/L) |      |
| 03-Mar-25               | 0.14       | 5.20       | 0.62                   | 0.48          | 7.88 |
| 05-Mar-25               | 0.46       | 5.20       | 0.45                   | 0.45          | 7.65 |
| 07-Mar-25               | 0.17       | 5.50       | 0.40                   | 0.39          | 7.78 |
| 12-Mar-25               | 0.15       | 5.60       | 0.35                   | 0.36          | 7.81 |
| 14-Mar-25               | 0.18       | 5.30       | 0.28                   | 0.36          | 8.02 |
| 17-Mar-25               | 0.13       | 5.60       | 0.42                   | 0.31          |      |
| 19-Mar-25               | 0.28       | 5.60       | 0.42                   | 0.31          | 8.03 |
| 21-Mar-25               | 0.22       | 5.60       | 0.43                   | 0.36          |      |
| Average                 | 0.22       | 5.45       | 0.42                   | 0.38          | 7.86 |
| Min                     | 0.13       | 5.20       | 0.28                   | 0.31          | 7.65 |
| Max                     | 0.46       | 5.60       | 0.62                   | 0.48          | 8.03 |

| End-of-Line WQS Field Data |            |            |                        |               |      |
|----------------------------|------------|------------|------------------------|---------------|------|
| Date                       | Turbidity  | Water Temp | Free Chlorine Residual |               | pH   |
|                            | Grab (NTU) | Grab (°C)  | Grab (mg/L)            | Online (mg/L) |      |
| 03-Mar-25                  | 0.07       | 5.50       | 0.50                   | 0.51          | 7.59 |
| 10-Mar-25                  | 0.07       | 6.50       | 0.57                   | 0.53          | 7.98 |
| 17-Mar-25                  | 0.27       | 6.90       | 0.53                   | 0.51          | 7.91 |
| 25-Mar-25                  | 0.12       | 7.20       | 0.57                   |               | 7.63 |
| Average                    | 0.13       | 6.53       | 0.54                   | 0.52          | 7.78 |
| Min                        | 0.07       | 5.50       | 0.50                   | 0.51          | 7.59 |
| Max                        | 0.27       | 7.20       | 0.57                   | 0.53          | 7.98 |

# WQ Field Data

## Mclver SS

| <b>Mclver SS Field Data</b> |                  |                   |                               |           |
|-----------------------------|------------------|-------------------|-------------------------------|-----------|
| <b>Date</b>                 | <b>Turbidity</b> | <b>Water Temp</b> | <b>Free Chlorine Residual</b> | <b>pH</b> |
|                             | Grab (NTU)       | Grab (°C)         | Grab (mg/L)                   |           |
| <b>03-Mar-25</b>            | 0.16             | 3.50              | 0.50                          | 7.59      |
| <b>10-Mar-25</b>            | 0.10             | 3.90              | 0.43                          | 8.01      |
| <b>17-Mar-25</b>            | 0.10             | 4.40              | 0.33                          | 7.72      |
| <b>25-Mar-25</b>            | 0.11             | 5.10              | 0.62                          | 7.60      |
| <b>Average</b>              | 0.12             | 4.23              | 0.47                          | 7.73      |
| <b>Min</b>                  | 0.10             | 3.50              | 0.33                          | 7.59      |
| <b>Max</b>                  | 0.16             | 5.10              | 0.62                          | 8.01      |

## Bulk Water Station

| <b>Bulk Water Stn Field Data</b> |                  |                   |                               |           |
|----------------------------------|------------------|-------------------|-------------------------------|-----------|
| <b>Date</b>                      | <b>Turbidity</b> | <b>Water Temp</b> | <b>Free Chlorine Residual</b> | <b>pH</b> |
|                                  | Grab (NTU)       | Grab (°C)         | Grab (mg/L)                   |           |
| <b>03-Mar-25</b>                 | 0.12             | 9.90              | 0.48                          | 7.65      |
| <b>05-Mar-25</b>                 | 0.19             | 4.00              | 0.68                          |           |
| <b>07-Mar-25</b>                 | 0.24             | 4.80              | 0.79                          | 7.88      |
| <b>10-Mar-25</b>                 | 0.09             | 5.50              | 0.45                          | 7.82      |
| <b>12-Mar-25</b>                 | 0.60             | 5.80              | 0.53                          | 7.68      |
| <b>14-Mar-25</b>                 | 0.15             | 5.90              | 0.56                          | 7.85      |
| <b>17-Mar-25</b>                 | 0.12             | 6.30              | 0.47                          | 7.64      |
| <b>19-Mar-25</b>                 | 0.15             | 5.00              | 0.57                          |           |
| <b>21-Mar-25</b>                 | 0.26             | 5.80              | 0.63                          | 7.60      |
| <b>25-Mar-25</b>                 | 0.21             | 7.10              | 0.59                          | 7.65      |
| <b>Average</b>                   | 0.21             | 6.01              | 0.58                          | 7.72      |
| <b>Min</b>                       | 0.09             | 4.00              | 0.45                          | 7.60      |
| <b>Max</b>                       | 0.60             | 9.90              | 0.79                          | 7.88      |