



## JOINT SHARED SERVICES COMMITTEE

THURSDAY, MAY 12, 2022, AT 9:00 A.M.  
ROOM 530 - 5<sup>th</sup> FLOOR – ABBOTSFORD CITY HALL & WEBEX

### AGENDA

---

1. **CALL TO ORDER**

2. **ADOPTION OF MINUTES**

2.1 Minutes of the Joint Shared Services Committee meeting of March 10, 2022 (attached) (p. 3)

3. **BUSINESS OUT OF MINUTES**

No items.

4. **DELEGATIONS**

No items.

5. **PRESENTATIONS**

No items.

6. **REPORTS**

6.1 **ABBOTSFORD MISSION WATER AND SEWER COMMISSION**

- .1 Bi-monthly JAMES Plant Report – March/April 2022  
(JSSC 018-2022) (J. Austin) (attached) (p. 7)
- .2 Bi-monthly Water Report – March/April 2022  
(JSSC 019-2022) (J. Austin) (attached) (p. 18)
- .3 Award of Contract 1220-2021-2654 – Supply and Delivery of Polymers for JAMES  
WWT Plant (J. Austin) (attached) (p. 27)
- .4 Award of RFP 1220-2021-2675 – Construction Services – JAMES Wastewater  
Treatment Plant Roof Replacement  
(JSSC-020-2022) (T. Dueckman) (attached) (p. 29)
- .5 Award of RFP 1220-2022-2746 – JAMES Plant Trickling Filter 1, Cell 4 Repair and  
Media Replacement Project (M. Schwanke) (attached) (p. 32)

- .6 Financial Statements – March 2022/2021 Unaudited Financial Statements  
(S. Grewal) (attached) (p. 35)
- .7 Financial Statements – December 2021 Unaudited Financial Statements  
(JSSC 25-2022 / 1830-03) (S. Grewal) (attached) (p. 45)
- .8 Amendments to Officer Designation & Delegation of Authority Bylaw  
(JSSC 24-2022 / 0550-02) (K. Basatia) (attached) (p. 56)

6.2 **RECYCLING**

None.

6.3 **TRANSIT**

None.

7. **NEW BUSINESS**

No items.

9. **ADJOURNMENT**

**NEXT MEETING DATE: Thursday, July 14, 2022**

---

JSSC Members Present: Mayor H. Braun (Abbotsford) (Chair); Councillor C. Crawford (Mission); Councillor C. Hamilton (Mission); Councillor D. Plecas (Mission); Councillor R. Siemens (Abbotsford)

Staff Present: Director, Utility Operations – J. Austin (Abbotsford); General Manager, Finance & Procurement Services – K. Basatia (Abbotsford); Manager, Financial Planning & Accounting – S. Grewal (Abbotsford); General Manager, Engineering & Regional Utilities – R. Isaac (Abbotsford); Director of Engineering & Public Works – T. Kyle (Mission); Deputy Treasurer/Collector – K. Onken (Mission); Director of Finance – D. Stewart (Mission); Project Engineer – A. Chiang (Abbotsford); Acting Director, Utilities Infrastructure – S. Chiu (Abbotsford); Senior Manager, Projects – D. Driedger (Abbotsford); Director, Projects & Development Engineering – N. Koning (Abbotsford); Operations Manager, Utilities – C. McLean (Mission); Project Engineer – T. Siebert (Abbotsford); City Clerk – G. Joseph (Abbotsford); Deputy City Clerk – Robin Charl (Abbotsford); Legislative Services Clerk – K. Hicks (Abbotsford)

1. CALL TO ORDER

The meeting was called to order at 9:00 a.m.

2. ADOPTION OF MINUTES

2.1. Minutes of the January 20, 2022 Meeting

---

Moved by Councillor Siemens, seconded by Councillor Plecas,

THAT the minutes of the Joint Shared Services Committee meeting held January 20, 2022, be adopted.

CARRIED

3. PRESENTATIONS

None.

4. DELEGATIONS

None.

5. BUSINESS OUT OF MINUTES

None.

---

6. REPORTS

6.1 ABBOTSFORD MISSION WATER AND SEWER COMMISSION

6.1.1 Bi-monthly JAMES Plant Report – January/February 2022 (5500-90)

---

Moved by Councillor Plecas, seconded by Councillor Siemens,

THAT Report No. JSSC 09-2022, regarding Bi-monthly JAMES Plant Report – January/February 2022, be received for information.

CARRIED

6.1.2 Bi-monthly Water Report – January/February 2022 (5600-00)

---

Moved by Councillor Crawford, seconded by Councillor Siemens,

THAT Report No. JSSC 02-2022, regarding Bi-monthly Water Report – January/February, be received for information.

CARRIED

6.1.3 Regional Water and Sewer – 2022 Operations Revenue/Cost Sharing (5600-00/5500-90)

---

Moved by Councillor Siemens, seconded by Councillor Hamilton,

1. THAT Report No. JSSC 07-2022, regarding Regional Water and Sewer – 2022 Operations Revenue/Cost Sharing, be received for information; and
2. THAT the Abbotsford Mission Water & Sewer Commission (WSC) approves the following percentages for the allocation of revenues for water and sewer operational and Non-DCC related Capital expenditures for 2022:

Sewer 2021 flow split: Abbotsford – 80.36%; Mission – 19.64%  
Water 2021 flow split: Abbotsford – 77.90%; Mission – 22.10%

CARRIED

6.1.4 Award of RFP 1220-2021-2693 JAMES Plant Clarifier #1 Rehabilitation (5330-70) (JSSC 06-2022)

---

Moved by Councillor Siemens, seconded by Councillor Crawford,

1. THAT RFP 1220-2021-2693 - JAMES Plant Clarifier No. 1 Rehabilitation, be awarded to Tritech Group Ltd., in the amount of \$419,050, plus GST;
2. THAT the General Manager of Engineering and Regional Utilities be authorized to approve all payments, commitments and change orders to Tritech Group Ltd. for JAMES Plant Clarifier No. 1 Rehabilitation, within the approved project budget, including applicable taxes; and

- 
3. THAT the City of Abbotsford's Mayor and Corporate Officer be authorized to execute all documents related to this contract.

CARRIED

6.1.5 2022 Financial Plan Carry Forward Amendment (1830-01)

---

Moved by Councillor Crawford, seconded by Councillor Siemens,

THAT Report No. JSSC 11-2022, regarding 2021 carry forwards and the 2022 amendments, be recommended for approval to the City of Abbotsford and City of Mission Councils, as required.

CARRIED

6.1.6 Award of Contract No. 1220-2022-2729 Supply and Delivery of Replacement Media for the JAMES Plant Trickling Filter #1 Cell #4

---

Moved by Councillor Siemens, seconded by Councillor Hamilton,

1. THAT Contract No. 1220-2022-2729 - Supply and Delivery of Replacement Media for the JAMES Plant Trickling Filter #1, Cell #4, be awarded to Brentwood Industries Inc., in the amount of \$970,251.80, plus GST;
2. THAT the General Manager, Engineering and Regional Utilities, be authorized to approve all commitments and change orders to Brentwood Industries Inc. for the Supply and Delivery of the Replacement Media for the JAMES Plant Trickling Filter #1, Cell #4, within the approved project budget, including applicable taxes; and
3. THAT the City of Abbotsford's Mayor and Corporate Officer be authorized to execute all documents related to this contract.

CARRIED

6.2 RECYCLING

None.

6.3 TRANSIT

None.

7. NEW BUSINESS

None.

---

8. ADJOURNMENT

Moved by Councillor Siemens, seconded by Councillor Hamilton,

THAT the Joint Shared Services Committee meeting held  
March 10, 2022, be adjourned (9:24 a.m.).

CARRIED

Certified Correct:

---

Mayor Henry Braun  
Chair

---

Gabryel Joseph  
City Clerk

# REPORT

---

To: Abbotsford/Mission Water & Sewer Commission

From: Jamie Austin, Director of Utility Operations

Date: May 6, 2022

Subject: JAMES Plant Bi-monthly Report – March, April 2022

File: 5500-90

Report No.: JSSC (UMC) 18-2022

Attachments: Appendix A – Definitions of Parameters  
Appendix B – Influent Flow Graphs  
Appendix C – Influent/Effluent cBOD Graphs  
Appendix D – Influent/Effluent TSS Graphs  
Appendix E – Effluent Ammonia versus pH Graphs

---

## RECOMMENDATION

THAT Report No. JSSC (UMC) 18-2022, dated May 6, 2022, from the Director of Utility Operations, regarding Bi-monthly JAMES Plant Report – March, April 2022 be received.

## PURPOSE

This is a bi-monthly report to provide updates to the Abbotsford/Mission Water & Sewer Commission (JSSC) on the JAMES Plant performance, based on the Plant data for the month of March, April 2022.

## BACKGROUND

The JAMES Wastewater Treatment Plant is required to meet all regulatory parameters for effluent discharge. Regulatory parameters that shall not be exceeded under the Municipal Wastewater Regulations (MWR) and Wastewater Systems Effluent Regulations (WSER) include:

- Flow – 122,500 m<sup>3</sup>/d;
- Fecal Coliform – 200 CFU/100 ml (outside the IDZ);
- Carbonaceous Biochemical Oxygen Demand (cBOD) – 45 mg/L (maximum day), 25 mg/L (monthly average);
- Total Suspended Solids (TSS) – 45 mg/L (maximum day), 25 mg/L (monthly average);
- Ammonia (NH<sub>3</sub>) – Acute Toxicity Requirements;
- Total Phosphorous, less than 1 mg/l (JAMES Plant has a substitution for this requirement);
- Ortho-phosphate, less than .5 mg/l (JAMES Plant has a substitution for this requirement); and
- Un-ionized Ammonia – below monthly maximum of 1.25 mg/L.

Details and definitions of the above parameters are included in Appendix A.

The JAMES Plant Operations undertake sampling and analysis on a daily basis to monitor the Plant performance. All results are forwarded to the Ministry of Environment (MoE) on a quarterly and yearly basis. All non-compliance parameters are listed in the reports to the MoE.

The influent flow, cBOD and TSS data and biosolids utilization (2022 Biosolids removed from site) are also provided in this report for comparison.

## DISCUSSION / ANALYSIS

The following table summarizes the seven effluent discharge criteria and JAMES Plant performance in March and April 2022:

Effluent Discharge Criteria	JAMES Plant Performance
Influent Flow (Appendix B)	Daily flows in March and April 2022 were within the discharge limit
Influent/Effluent cBOD (Appendix C)	The effluent cBOD in March and April 2022 was well below the regulated limit of 45 mg/L.
Influent/Effluent TSS (Appendix D)	The effluent TSS in March and April 2022 was well below the regulated limit of 45 mg/L for all samples.
Ammonia (NH <sub>3</sub> ) (Appendix E)	All tests completed in March and April 2022 were well below the toxicity curve.
Effluent Fecal Coliform	All required fecal coliform testing in March and April were below the limit of 200 counts per 100ml, outside the initial dilution zone.
Total Phosphorous	Average for the month of April 2022 was 6.15 mg/L. This is above the MWR requirement of 1 mg/l. The JAMES Plant was given a substitution for this requirement and is in compliance with the Ministry at this time.
Ortho-phosphate	Average for the month of April 2022 was 5.28 mg/L. This is above the MWR requirement of .5 mg/l. The James Plant was given a substitution for this requirement and is in compliance with the Ministry at this time.
Un-ionized Ammonia	Below 1.25 mg/L Un-ionized ammonia (Monthly Maximum). All samples for April 2022 were below 1.25 mg/L. Monthly maximum for April was 0.13 mg/L.

## Biosolids Program

The following table summarizes the biosolids shipped off site by the contractor for 2022.

SOLIDS removed from site	TOTAL 2022
Scale (wet tonnes)	2445

## FINANCIAL IMPLICATIONS

N/A

## COMMUNICATION PLAN

N/A

## SUMMARY

The Plant effluent quality, throughout the months of March and April 2022 met all regulatory parameters for effluent discharge in Flow, cBOD, TSS, Fecal Coliforms and Un-ionized Ammonia. A substitution for Total Phosphorous and Ortho-phosphate requirement was received from the Director of the Ministry of Environment putting the JAMES Plant back into full compliance.

**APPROVED**



By jaustin at 1:13 pm, Apr 20, 2022

---

Jamie Austin B.Sc, A.Sc.T.  
Director, Utility Operations

**APPROVED**



By SChiu at 4:52 pm, Apr 20, 2022

---

Stella Chiu, P.Eng.  
Acting Director, Utilities Infrastructure

**APPROVED**



By risaac at 8:38 am, Apr 21, 2022

---

Rob Isaac, P.L.Eng.  
General Manager, Engineering and  
Regional Utilities

## Appendix A Definitions of Parameters

### Fecal Coliform

The fecal coliform test gives an indication that bacteria originating from the intestines of warm blooded animals may be present in the wastewater. The limit for coliforms is 200 CFU/100 ml outside the initial dilution zone. The counts recorded are end of pipe prior to dilution from the Fraser River.

### Carbonaceous Biochemical Oxygen Demand (cBOD)

cBOD is the rate at which oxygen in wastewater is used for the decomposition of organic matter in the wastewater. High cBOD rates reflect high organic content in the wastewater. Treatment plant processes reduce cBOD levels before discharge to the environment.

### Total Suspended Solids (TSS)

TSS is the total amount of solids that remain in suspension in the water. The higher the suspended solids concentration, the harder the effluent is to disinfect and the higher the BOD will be.

### Ammonia (NH<sub>3</sub>)

The effluent discharge criterium for ammonia is set based on the toxicity curve. Different levels of ammonia are allowed at different pH, i.e. at higher pH, lesser ammonia is allowed to be discharged.

### Total Phosphorous

The MWR specifies that Total Phosphorous must be below 1 mg/l. The James Plant has a substitution to this requirement.

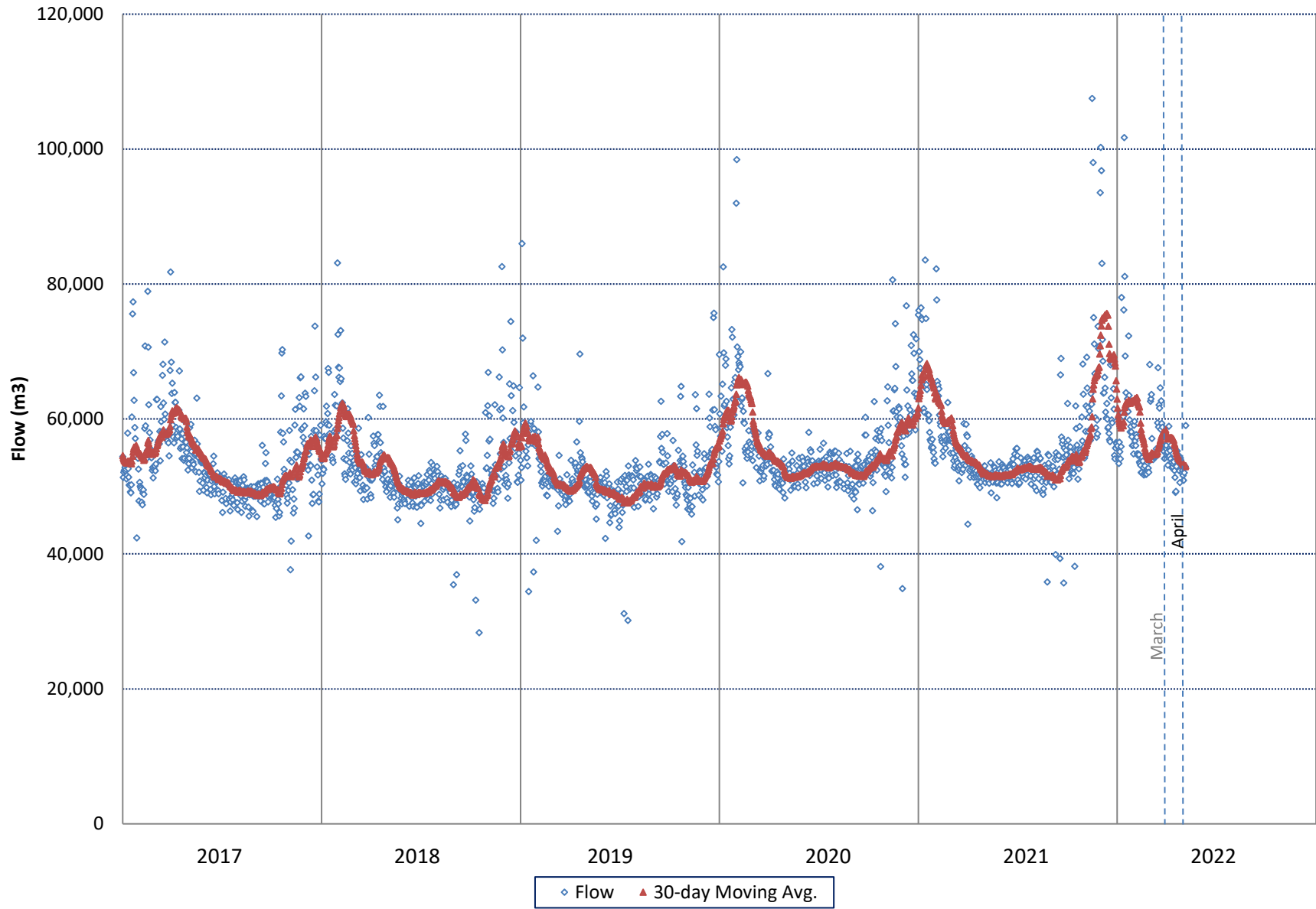
### Ortho-phosphate

The MWR specifies that Ortho-phosphate must be below .5 mg/l. The James Plant has a substitution to this requirement.

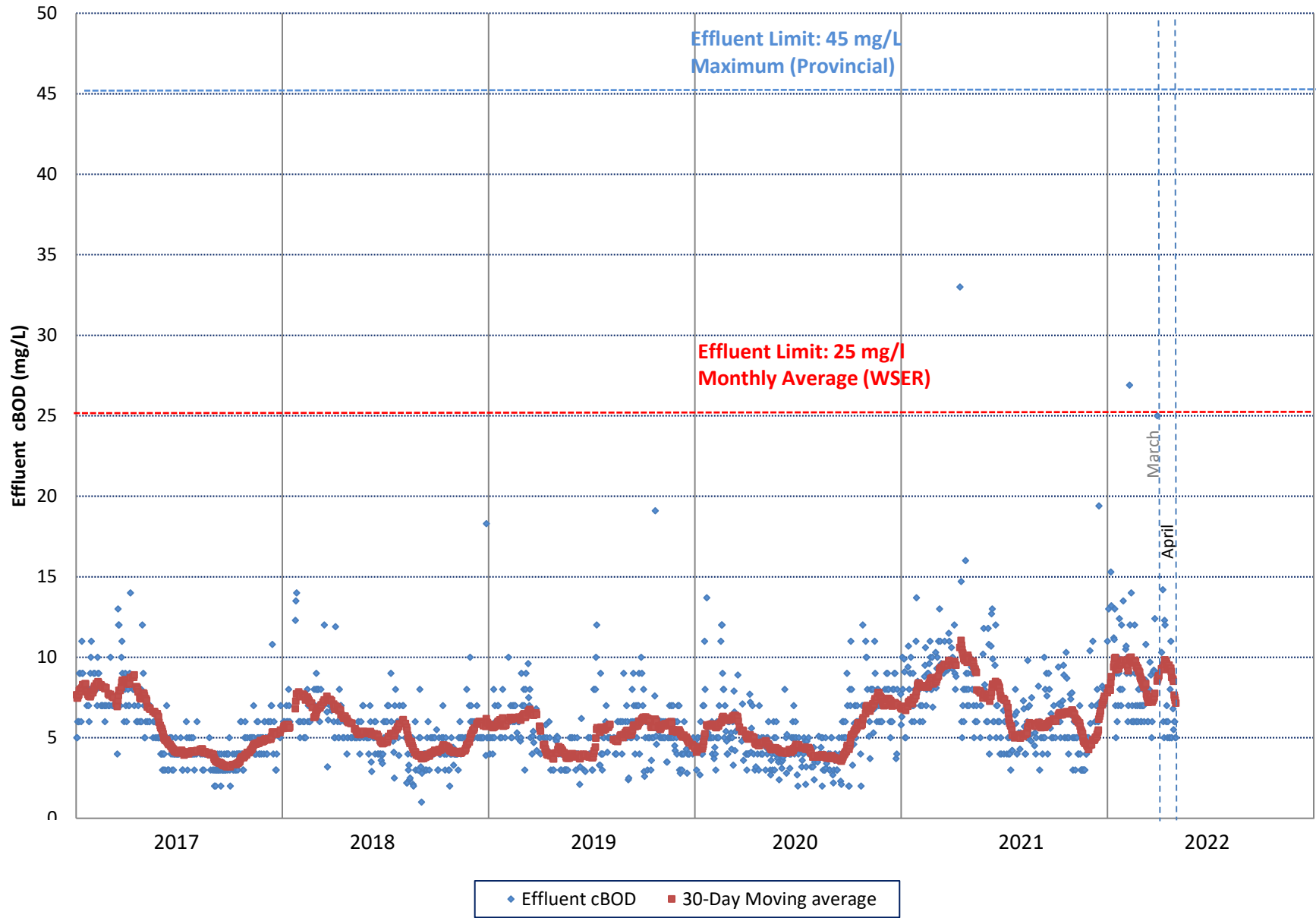
### Un-ionized Ammonia NH<sub>3</sub>

Un-ionized ammonia must be below 1.25 mg/l (Monthly Maximum). This is a combination of Ammonium NH<sub>4</sub><sup>+</sup> and pH. The higher the pH the more likely the ammonia will be in the Un-ionized form NH<sub>3</sub>.

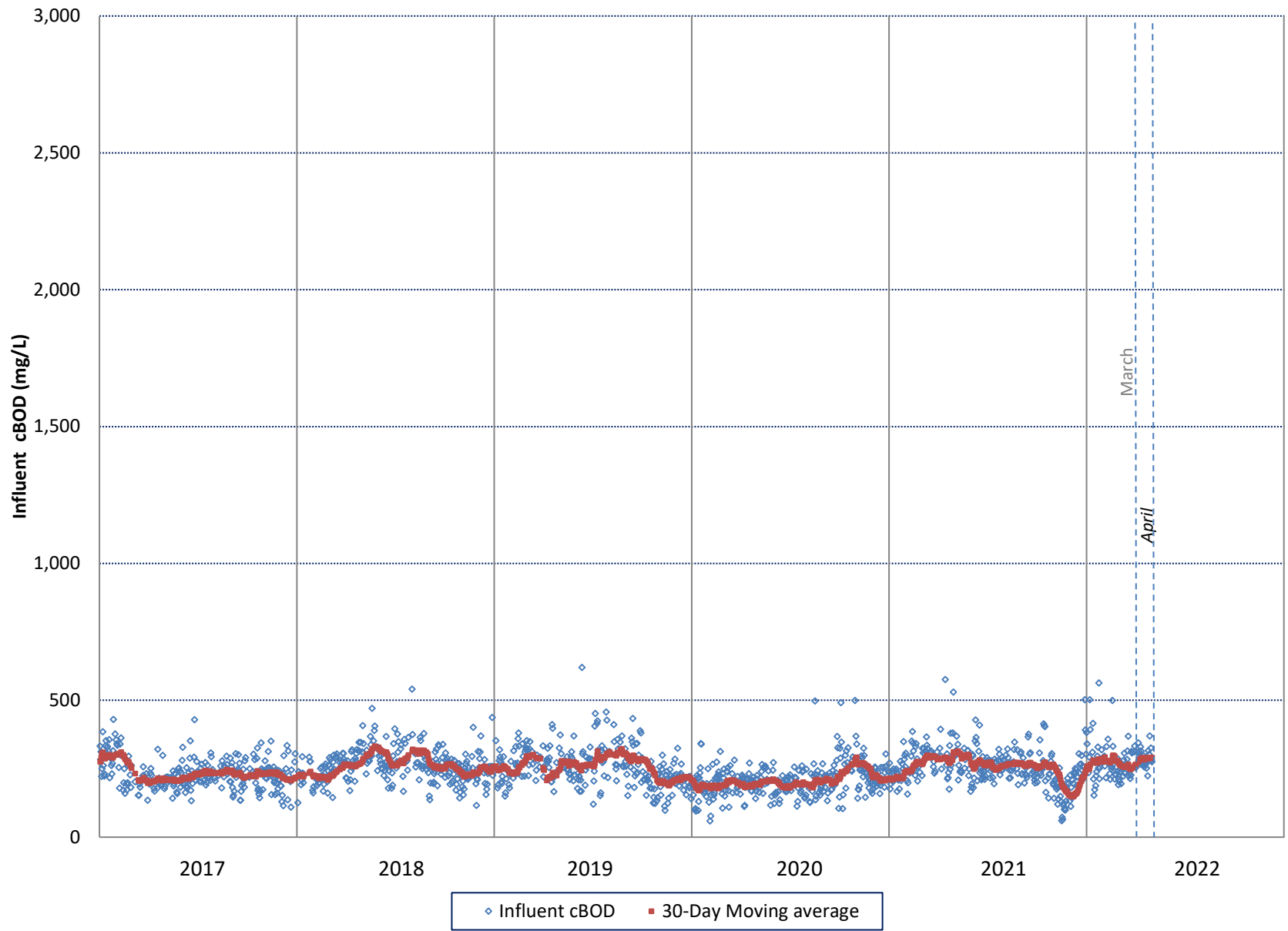
# Appendix B - Flow



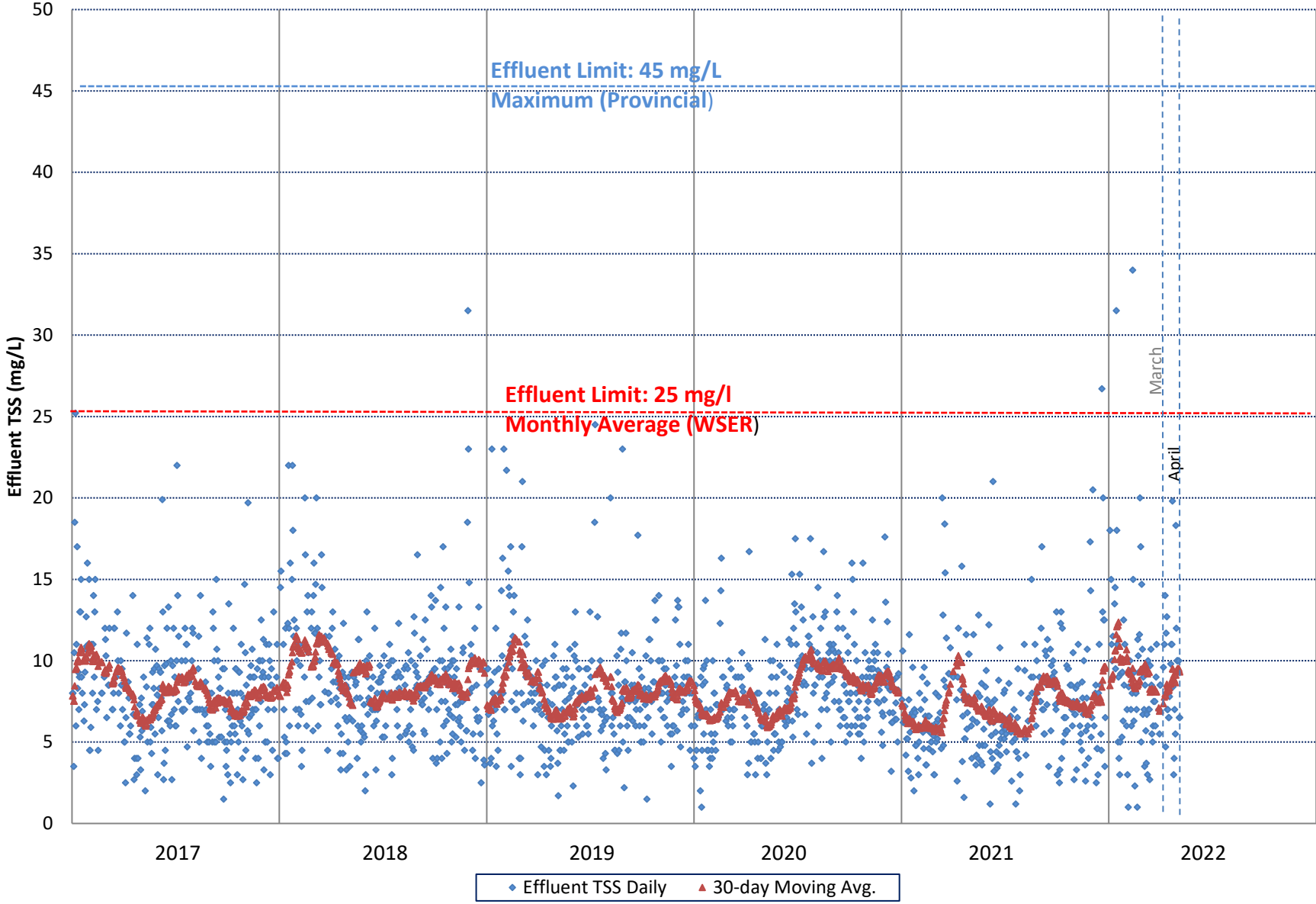
# Appendix C - Effluent cBOD



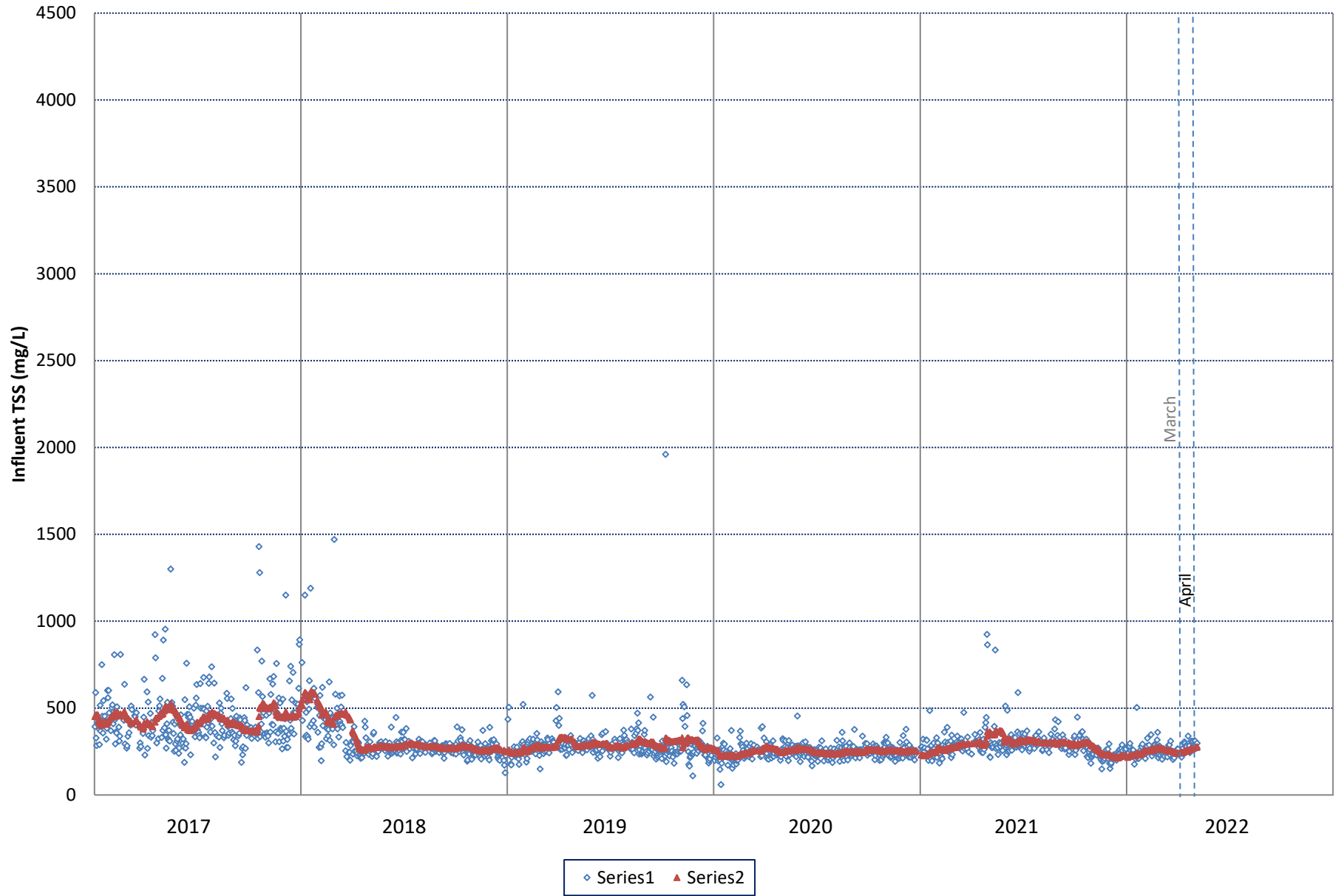
## Appendix C - Influent cBOD



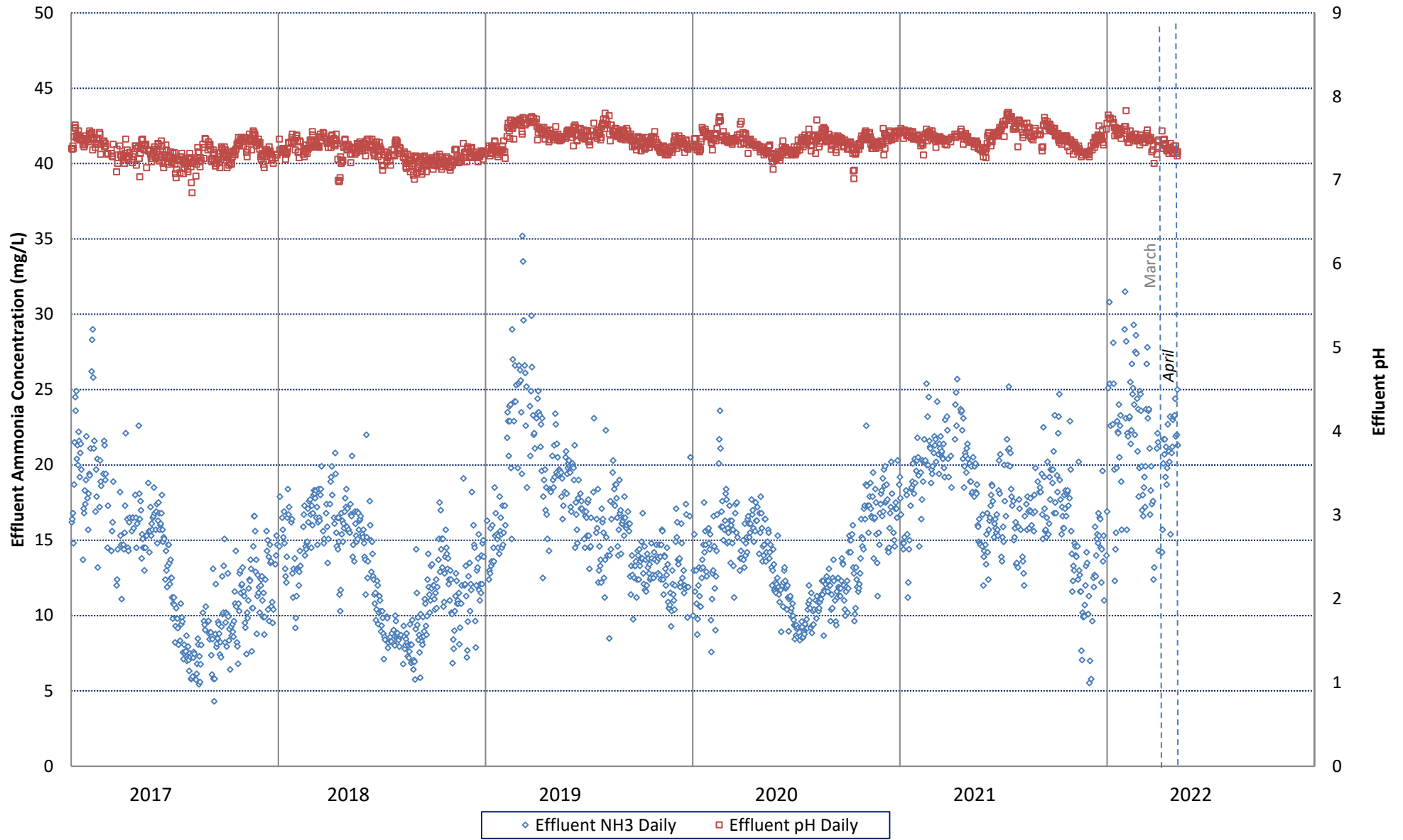
# Appendix D - Effluent TSS



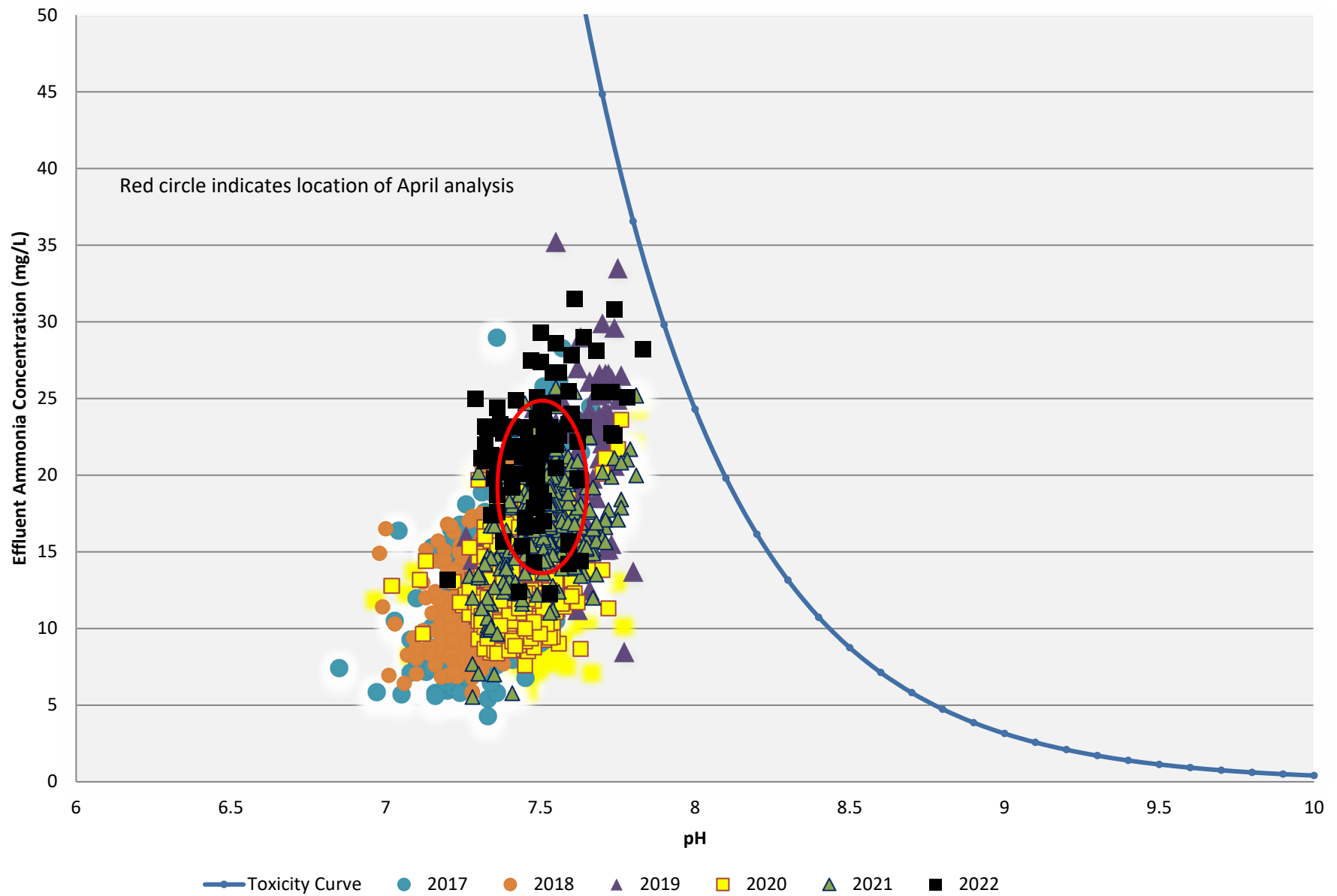
# Appendix D - Influent TSS



# Appendix E - Effluent Ammonia and pH



## Appendix E - Effluent Ammonia vs pH



# REPORT

---

To: Abbotsford Mission Water & Sewer Commission

From: Jamie Austin, Director of Utility Operations

Date: May 6, 2022

Subject: Bi-monthly Water Report – March & April 2022

File: 5600-00

Report No.: JSSC 019-2022

Attachments: Appendix A – Daily Demands Graph  
Appendix B – Daily Demands Table  
Appendix C – Average Monthly Water Demands (10-Year Comparison)  
Appendix D – Year-to-Date Demand Distribution (5-Year Comparison)  
Appendix E – Dickson Lake Level Graph  
Appendix F – Cannell Lake Level Graph  
Appendix G – Dickson Lake Snowpack

---

## RECOMMENDATION

THAT Report No. JSSC 10-2022, dated May 6, 2022, from the Director of Utility Operations, regarding the Bi-Monthly Water Report - March & April 2022 , be received, for information.

## PURPOSE

This is a bi-monthly report to provide updates to the Abbotsford Mission Water & Sewer Commission on the water system performance (water demands & quality), based on data up until May 1, 2022.

## BACKGROUND

### Water Consumption

The water system is supplied by Norrish Creek, Cannell Lake and several groundwater wells. The water available to consumers is a function of Provincial licenses and infrastructure hydraulics.

### Water Quality

System water quality requirements are set through the BC Drinking Water Protection Act & Regulations and the Guidelines for Canadian Drinking Water Quality. Operations monitors the water quality through weekly, monthly, quarterly and annual programs. All water quality results are reported annually to the Ministry of Health and any non-compliant results, are immediately reported to the Ministry.

## DISCUSSION / ANALYSIS

### Water Flows

- Appendices A & B present March & April 2022 daily water demands with a comparison to the same time period in the previous year. Appendix C compares the last quarter's average monthly demands to those from the same time period over the prior 10 years.
- The March average demand was approximately 0.5% higher this year relative to the last.
- The April average demand was approximately 7.5% lower this year relative to the last.
- Appendix D presents cumulative water consumption since the start of the year to the end of the noted month, broken out by source and municipality, and compares values to those from the prior 5 years.
- Appendices E & F illustrate Dickson and Cannell Lake levels, respectively, for the current year, the prior year, and the year during which their greatest drawdowns occurred. Dickson Lake and Cannell Lake levels are at 100% and 86% of storage capacity, respectively.
- Snowpack is measured at Dickson Lake on a monthly basis from January to May, as illustrated in Appendix G. The amount of water stored as snow is represented by the 'snow water equivalent', which is the depth of water when the snow is melted. Snowpack measurements at Dickson Lake were recorded since 1992. Snow water equivalent measurement is 84.5% of the average recorded year. The depth of the snow water equivalent impacts how long Dickson Lake remains at a full level prior to the summer drawdown commencing.

### Water Quality

- All water quality results during March & April 2022 met regulatory requirements.

## FINANCIAL IMPLICATIONS

N/A

## COMMUNICATION PLAN

Stage 1 water restrictions start May 1.

## SUMMARY

Average day demands in March & April 2022 were 0.5% higher and 7.5% lower, respectively, compared to the same months last year. Water quality results met all regulatory requirements. Dickson Lake and Cannell Lake levels are at 100% and 86% of storage capacity, respectively.

APPROVED



By SChiu at 4:55 pm, Apr 20, 2022

APPROVED



By jaustin at 1:22 pm, Apr 20, 2022

---

Rob Isaac, P. L. Eng.

General Manager, Engineering & Regional

Utili

APPROVED



By risaac at 8:36 am, Apr 21, 2022

---

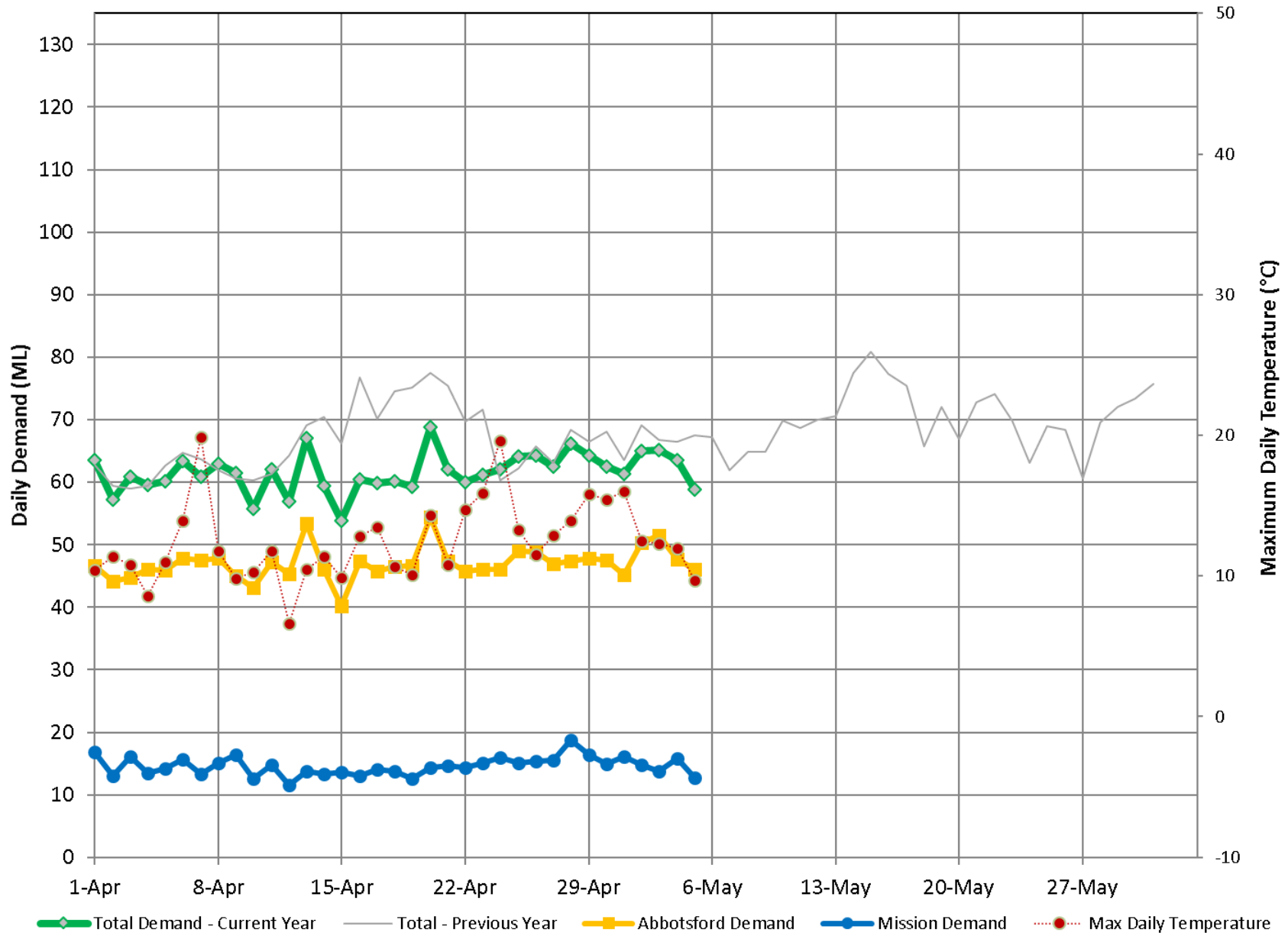
Jamie Austin, B.Sc, ASc.T.

Director, Utility Operations

---

Stella Chiu, P. Eng; M. Eng.; LEED AP  
Acting Director, Utilities Infrastructure

## APPENDIX A – DAILY DEMANDS (GRAPHICAL)

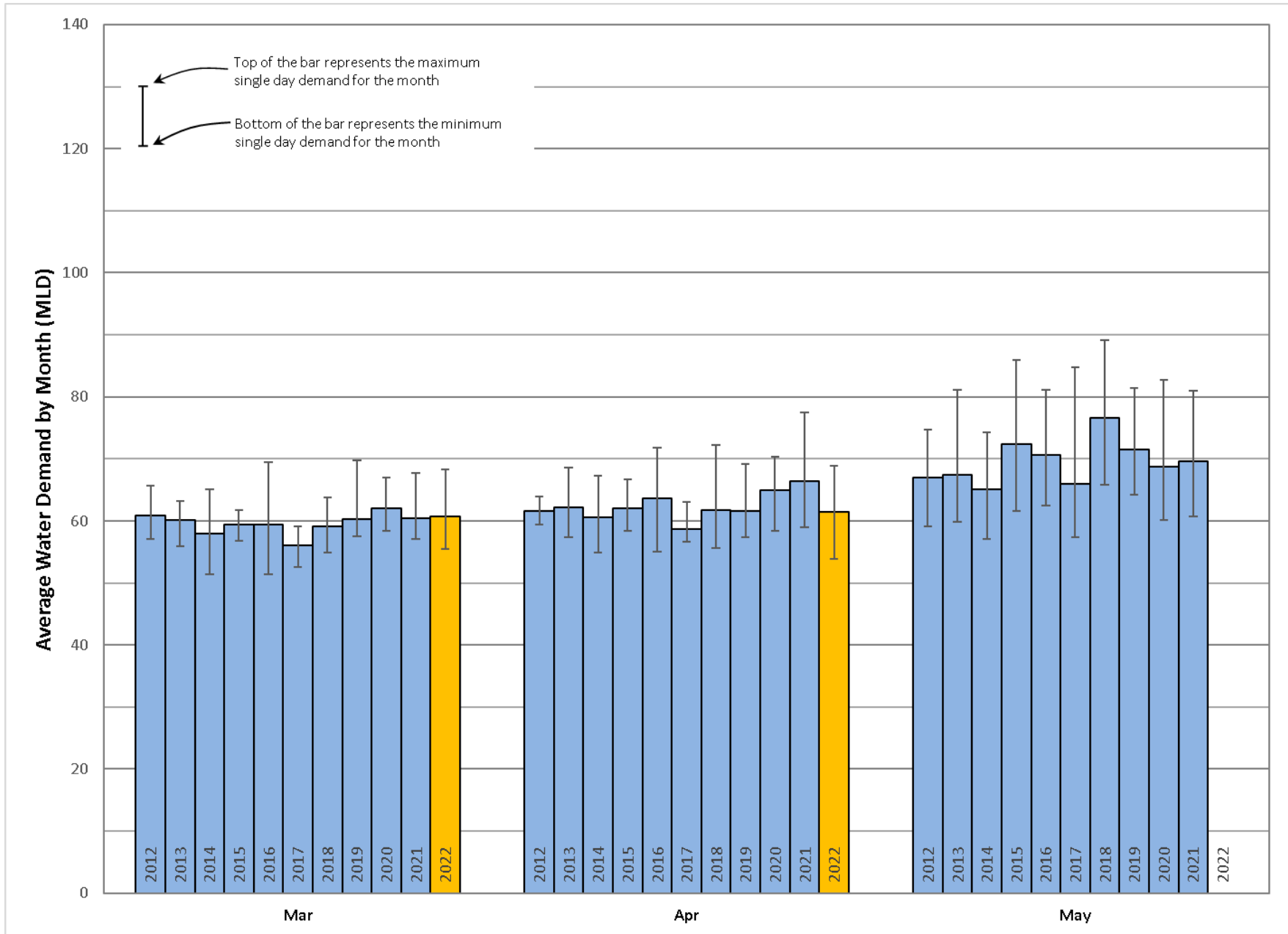


## APPENDIX B – DAILY DEMANDS (TABULAR)

March														
	2022							2021						
	Total MLD	Mission MLD	Abbotsford MLD	FVRD MLD	Mission % of Total	Abbotsford % of Total	FVRD % of Total	Total MLD	Mission MLD	Abbotsford MLD	FVRD MLD	Mission % of Total	Abbotsford % of Total	FVRD % of Total
1-Mar	62.0	13.4	48.7	0.00	21.53%	78.47%	0.00%	59.8	13.4	46.4	0.00	22.36%	77.63%	0.00%
2-Mar	58.5	13.8	44.7	0.00	23.55%	76.45%	0.00%	60.0	13.1	46.9	0.00	21.77%	78.23%	0.00%
3-Mar	63.0	14.0	49.0	0.00	22.21%	77.79%	0.00%	57.1	13.1	44.0	0.00	22.92%	77.08%	0.00%
4-Mar	62.0	14.6	47.4	0.00	23.53%	76.47%	0.00%	61.5	14.1	47.4	0.00	22.91%	77.09%	0.00%
5-Mar	62.0	14.8	47.2	0.00	23.81%	76.19%	0.00%	59.4	12.6	46.9	0.00	21.13%	78.87%	0.00%
6-Mar	61.7	14.3	47.4	0.00	23.20%	76.80%	0.00%	58.3	13.3	45.0	0.00	22.84%	77.16%	0.00%
7-Mar	65.0	14.2	50.7	0.00	21.92%	78.08%	0.00%	59.2	14.3	44.9	0.00	24.22%	75.78%	0.00%
8-Mar	68.3	14.5	53.8	0.00	21.20%	78.80%	0.00%	59.9	13.3	46.6	0.00	22.17%	77.83%	0.00%
9-Mar	64.5	13.4	51.1	0.00	20.70%	79.30%	0.00%	61.4	14.1	47.3	0.00	22.94%	77.06%	0.00%
10-Mar	62.6	13.5	49.1	0.00	21.50%	78.50%	0.00%	60.1	12.5	47.6	0.00	20.84%	79.16%	0.00%
11-Mar	61.9	13.7	48.3	0.00	22.05%	77.95%	0.00%	61.8	14.0	47.8	0.00	22.69%	77.31%	0.00%
12-Mar	61.0	14.2	46.8	0.00	23.29%	76.71%	0.00%	61.3	13.7	47.5	0.00	22.42%	77.58%	0.00%
13-Mar	61.5	15.2	46.2	0.00	24.77%	75.23%	0.00%	60.3	13.8	46.5	0.00	22.91%	77.09%	0.00%
14-Mar	61.7	14.5	47.2	0.00	23.45%	76.55%	0.00%	60.0	13.3	46.7	0.00	22.19%	77.81%	0.00%
15-Mar	57.1	12.9	44.2	0.00	22.63%	77.37%	0.00%	59.8	13.5	46.4	0.00	22.50%	77.50%	0.00%
16-Mar	60.9	13.7	47.3	0.00	22.41%	77.59%	0.00%	61.7	14.7	47.1	0.00	23.75%	76.25%	0.00%
17-Mar	58.4	14.1	44.3	0.00	24.11%	75.89%	0.00%	61.1	13.6	47.5	0.00	22.29%	77.71%	0.00%
18-Mar	60.3	14.2	46.1	0.00	23.59%	76.41%	0.00%	60.5	12.8	47.7	0.00	21.15%	78.85%	0.00%
19-Mar	59.8	14.5	45.2	0.00	24.31%	75.69%	0.00%	60.0	13.2	46.9	0.00	21.92%	78.08%	0.00%
20-Mar	55.5	13.5	42.1	0.00	24.29%	75.71%	0.00%	59.7	13.2	46.5	0.00	22.06%	77.94%	0.00%
21-Mar	56.5	13.3	43.1	0.00	23.59%	76.41%	0.00%	58.1	13.5	44.6	0.00	23.26%	76.74%	0.00%
22-Mar	59.8	14.1	45.7	0.00	23.52%	76.48%	0.00%	59.8	13.0	46.8	0.00	21.70%	78.30%	0.00%
23-Mar	59.8	14.3	45.5	0.00	23.96%	76.04%	0.00%	61.7	13.2	48.5	0.00	21.39%	78.61%	0.00%
24-Mar	59.9	14.7	45.2	0.00	24.54%	75.46%	0.00%	60.4	13.2	47.2	0.00	21.92%	78.08%	0.00%
25-Mar	59.7	13.8	45.9	0.00	23.08%	76.92%	0.00%	60.3	13.6	46.7	0.00	22.58%	77.42%	0.00%
26-Mar	57.4	13.9	43.5	0.00	24.24%	75.76%	0.00%	60.9	13.6	47.3	0.00	22.31%	77.69%	0.00%
27-Mar	59.7	15.2	44.5	0.00	25.40%	74.60%	0.00%	59.2	13.3	45.9	0.00	22.49%	77.51%	0.00%
28-Mar	61.0	15.0	46.0	0.00	24.54%	75.46%	0.00%	57.2	14.4	42.8	0.00	25.15%	74.85%	0.00%
29-Mar	61.4	14.8	46.6	0.00	24.11%	75.89%	0.00%	64.2	13.1	51.1	0.00	20.45%	79.55%	0.00%
30-Mar	62.1	14.8	47.3	0.00	23.88%	76.12%	0.00%	67.7	14.4	53.3	0.00	21.32%	78.68%	0.00%
31-Mar	58.8	12.9	45.8	0.00	22.02%	77.98%	0.00%	62.8	13.7	49.1	0.00	21.84%	78.16%	0.00%
Total	1884.0	437.6	1446.4	0.00				1875.2	418.5	1456.6	0.00			
Max	68.3	15.2	53.8	0.00	25.40%	79.30%	0.00%	67.7	14.7	53.3	0.00	25.15%	79.55%	0.00%
Min	55.5	12.9	42.1	0.00	20.70%	74.60%	0.00%	57.1	12.5	42.8	0.00	20.45%	74.85%	0.00%
Avg	60.8	14.1	46.7	0.00	23.23%	76.77%	0.00%	60.5	13.5	47.0	0.00	22.32%	77.68%	0.00%

April														
	2022							2021						
	Total MLD	Mission MLD	Abbotsford MLD	FVRD MLD	Mission % of Total	Abbotsford % of Total	FVRD % of Total	Total MLD	Mission MLD	Abbotsford MLD	FVRD MLD	Mission % of Total	Abbotsford % of Total	FVRD % of Total
1-Apr	63.5	16.8	46.7	0.00	26.47%	73.53%	0.00%	62.8	14.3	48.4	0.0	22.85%	77.15%	0.00%
2-Apr	57.3	13.1	44.2	0.00	22.84%	77.16%	0.00%	59.4	14.2	45.3	0.0	23.84%	76.16%	0.00%
3-Apr	60.8	16.1	44.7	0.00	26.54%	73.46%	0.00%	58.9	14.1	44.9	0.0	23.86%	76.14%	0.00%
4-Apr	59.6	13.5	46.0	0.00	22.72%	77.28%	0.00%	59.4	15.0	44.4	0.0	25.31%	74.69%	0.00%
5-Apr	60.1	14.2	45.9	0.00	23.60%	76.40%	0.00%	62.7	15.7	47.0	0.0	24.98%	75.02%	0.00%
6-Apr	63.5	15.6	47.8	0.00	24.65%	75.35%	0.00%	64.8	14.7	50.1	0.0	22.72%	77.28%	0.00%
7-Apr	60.9	13.3	47.6	0.00	21.90%	78.10%	0.00%	63.7	13.3	50.3	0.0	20.92%	79.08%	0.00%
8-Apr	62.9	15.0	47.9	0.00	23.90%	76.10%	0.00%	61.9	14.7	47.2	0.0	23.74%	76.26%	0.00%
9-Apr	61.5	16.5	45.1	0.00	26.76%	73.24%	0.00%	60.6	14.1	46.4	0.0	23.33%	76.67%	0.00%
10-Apr	55.7	12.6	43.1	0.00	22.55%	77.45%	0.00%	60.3	13.8	46.5	0.0	22.84%	77.16%	0.00%
11-Apr	62.0	14.8	47.2	0.00	23.81%	76.19%	0.00%	61.3	15.2	46.1	0.0	24.81%	75.19%	0.00%
12-Apr	56.9	11.6	45.3	0.00	20.38%	79.62%	0.00%	64.3	15.1	49.3	0.0	23.42%	76.58%	0.00%
13-Apr	67.1	13.7	53.3	0.00	20.48%	79.52%	0.00%	69.2	15.6	53.5	0.0	22.60%	77.40%	0.00%
14-Apr	59.4	13.3	46.1	0.00	22.45%	77.55%	0.00%	70.4	15.9	54.5	0.0	22.55%	77.45%	0.00%
15-Apr	53.9	13.7	40.2	0.00	25.36%	74.64%	0.00%	66.1	16.6	49.5	0.0	25.14%	74.86%	0.00%
16-Apr	60.4	13.0	47.4	0.00	21.54%	78.46%	0.00%	76.7	17.1	59.6	0.0	22.32%	77.68%	0.00%
17-Apr	59.9	14.1	45.8	0.00	23.57%	76.43%	0.00%	70.1	17.8	52.3	0.0	25.44%	74.56%	0.00%
18-Apr	60.2	13.7	46.5	0.00	22.74%	77.26%	0.00%	74.6	18.5	56.1	0.0	24.84%	75.16%	0.00%
19-Apr	59.3	12.6	46.6	0.00	21.29%	78.71%	0.00%	75.1	17.1	58.1	0.0	22.75%	77.25%	0.00%
20-Apr	68.8	14.3	54.5	0.00	20.83%	79.17%	0.00%	77.5	17.4	60.1	0.0	22.45%	77.55%	0.00%
21-Apr	62.1	14.7	47.3	0.00	23.71%	76.29%	0.00%	75.5	18.7	56.8	0.0	24.76%	75.24%	0.00%
22-Apr	60.0	14.3	45.7	0.00	23.85%	76.15%	0.00%	69.7	16.3	53.4	0.0	23.42%	76.58%	0.00%
23-Apr	61.1	15.1	46.0	0.00	24.70%	75.30%	0.00%	71.6	15.5	56.1	0.0	21.70%	78.30%	0.00%
24-Apr	62.1	16.0	46.1	0.00	25.75%	74.25%	0.00%	60.3	14.9	45.4	0.0	24.69%	75.31%	0.00%
25-Apr	64.1	15.1	49.0	0.00	23.61%	76.39%	0.00%	62.2	15.1	47.1	0.0	24.24%	75.76%	0.00%
26-Apr	64.3	15.4	48.9	0.00	24.02%	75.98%	0.00%	65.8	14.6	51.1	0.0	22.28%	77.72%	0.00%
27-Apr	62.5	15.5	47.0	0.00	24.79%	75.21%	0.00%	63.1	14.7	48.5	0.0	23.25%	76.75%	0.00%
28-Apr	66.1	18.7	47.4	0.00	28.33%	71.67%	0.00%	68.4	14.3	54.1	0.0	20.86%	79.14%	0.00%
29-Apr	0.0	0.0	0.0	0.00				66.5	14.7	51.8	0.0	22.16%	77.84%	0.00%
30-Apr	0.0	0.0	0.0	0.00				68.1	15.5	52.6	0.0	22.77%	77.23%	0.00%
Total	1716.0	406.6	1309.4	0.00				1990.7	464.6	1526.1	0.0			
Max	68.8	18.7	54.5	0.00	28.33%	79.62%	0.00%	77.5	18.7	60.1	0.0	25.44%	79.14%	0.00%
Min	0.0	0.0	0.0	0.00	20.38%	71.67%	0.00%	58.9	13.3	44.4	0.0	20.86%	74.56%	0.00%
Avg	61.3	13.6	43.6	0.00	22.11%	71.22%	0.00%	66.3	15.5	50.9	0.0	23.36%	76.74%	0.00%

### APPENDIX C – AVERAGE MONTHLY WATER DEMANDS (10-YEAR COMPARISON)

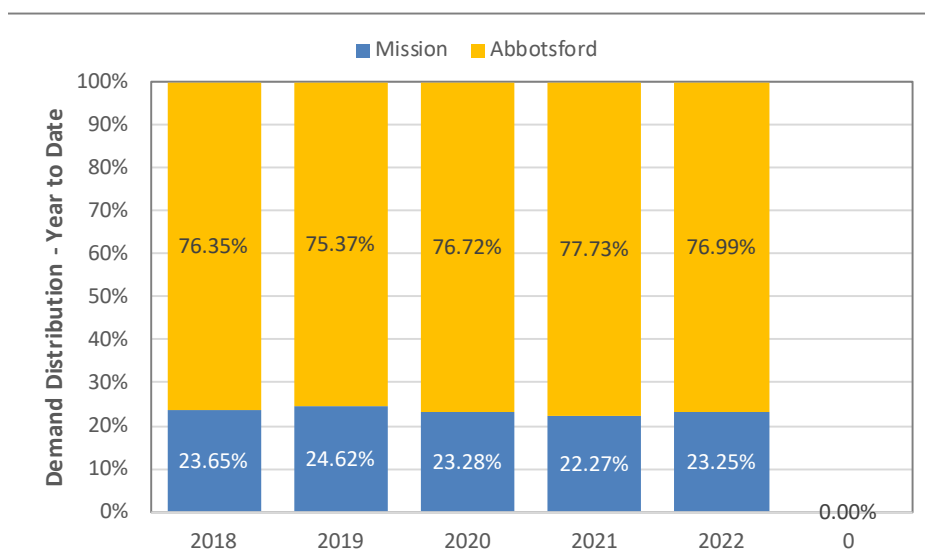
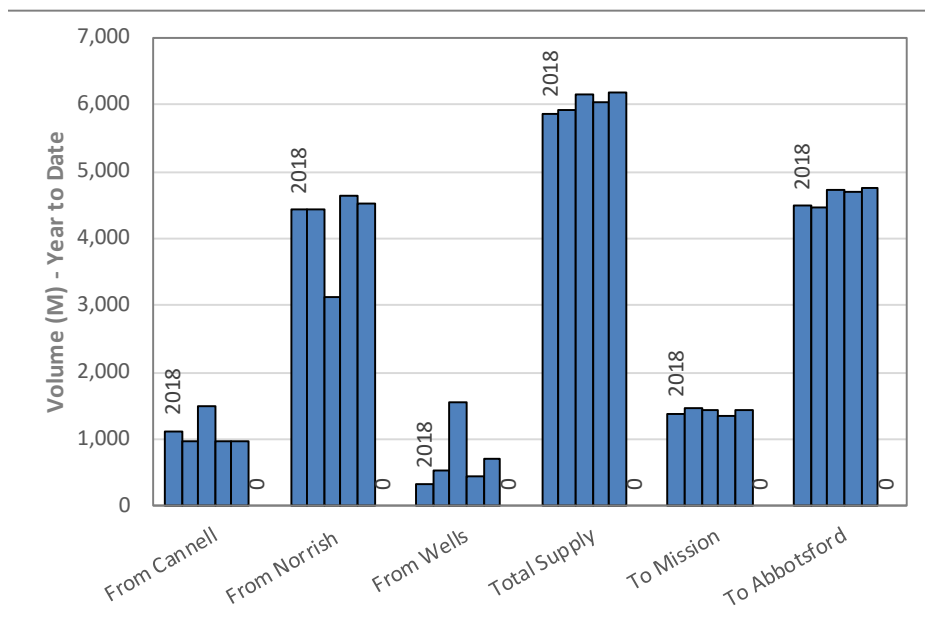


## APPENDIX D – YEAR TO DATE DEMAND DISTRIBUTION (5-YEAR COMPARISON)

Data Up Until May-05 for all years

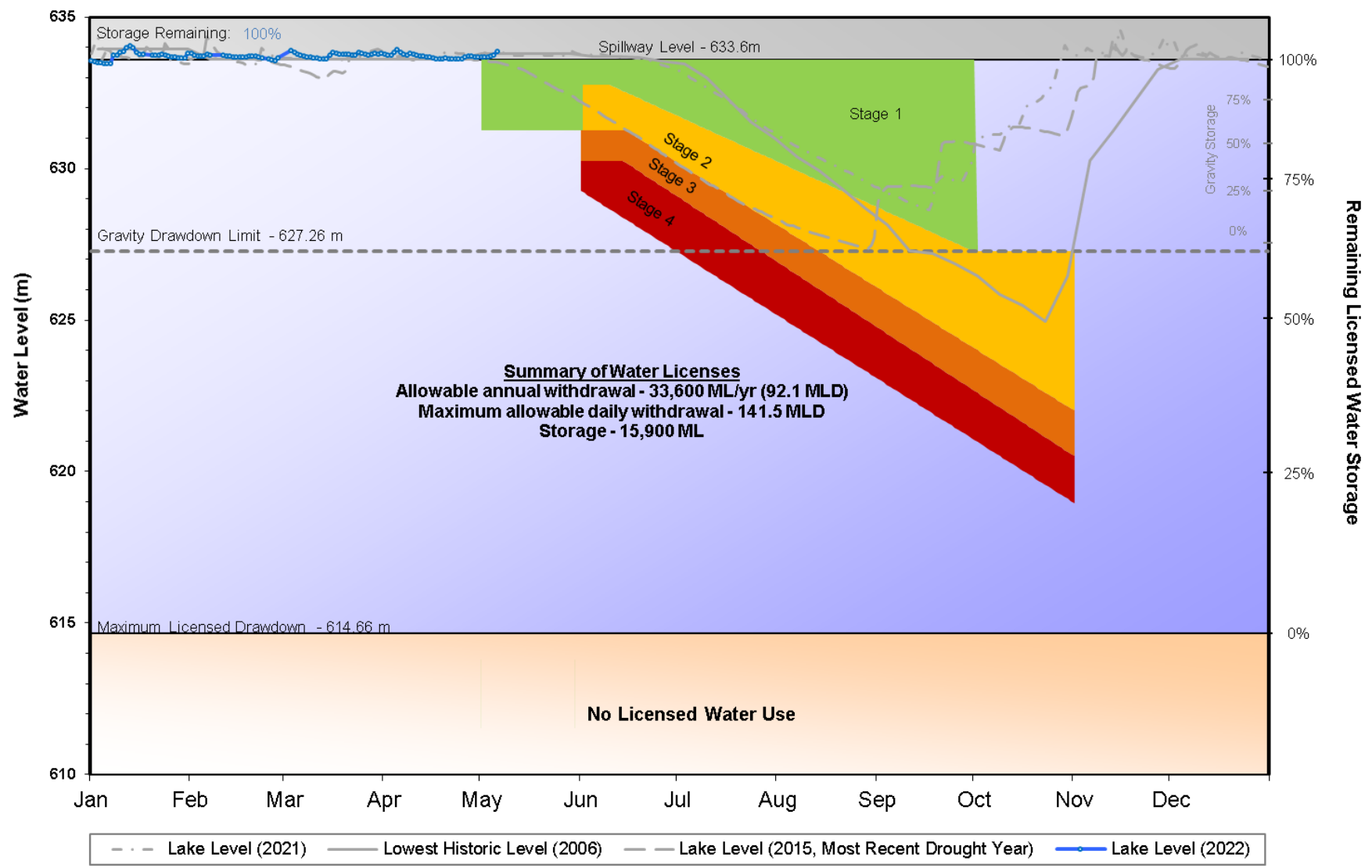
Year	ML Supplied				ML Consumed	
	From Cannell	From Norrish	From Wells	Total Supply	To Mission	To Abbotsford
2018	1,118	4,423	325	5,867	1,387	4,479
2019	958	4,432	541	5,931	1,460	4,471
2020	1,489	3,125	1,548	6,162	1,434	4,727
2021	954	4,624	448	6,026	1,342	4,684
2022	955	4,512	696	6,167	1,434	4,748
0	0	0	0	0	0	0

Historic Annual Totals
24,978
24,444
24,842
26,051
#N/A



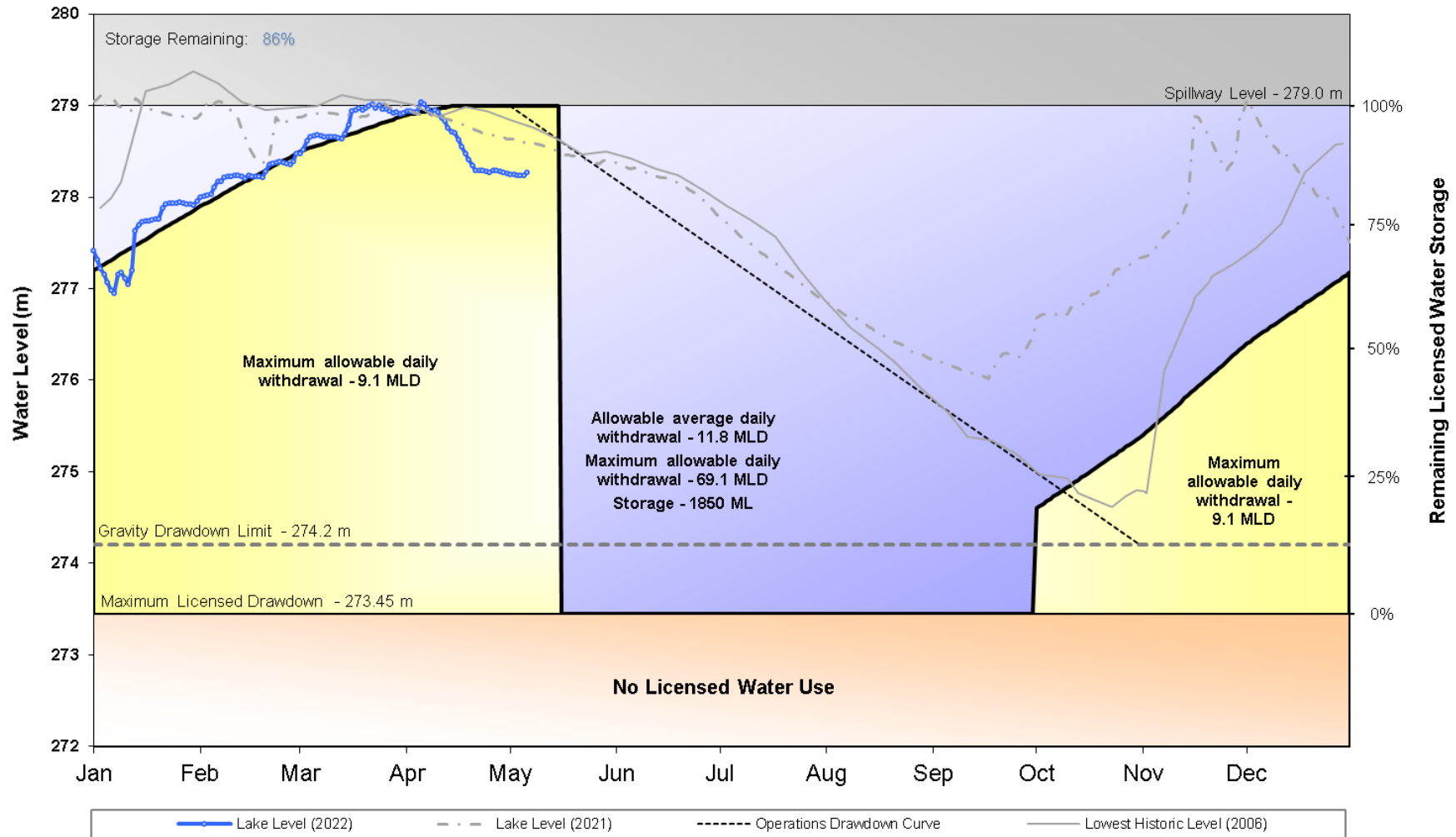
The values in the chart represent the demand distribution based on five bulk water supply meters. The operations cost sharing ratio is adjusted annually based on comparison to the flow meters at the water supply take-off points in Mission.

### APPENDIX E – DICKSON LAKE LEVEL



Gravity discharge from the lake is only available when the lake level is above an elevation of 627.56 m. The significance of the 'Gravity Drawdown' elevation is that pumping from the lake may be required at certain times of the year, to ensure sufficient flow in Norrish Creek downstream. While a significant amount of the licensed storage volume is below the 'Gravity Drawdown' elevation, pumping of this water would require ongoing operation of pumps, a generator, and re-fueling of the system. Relative to releasing the water by gravity, pumping results in an increased risk and cost for the discharge of water from Dickson Lake.

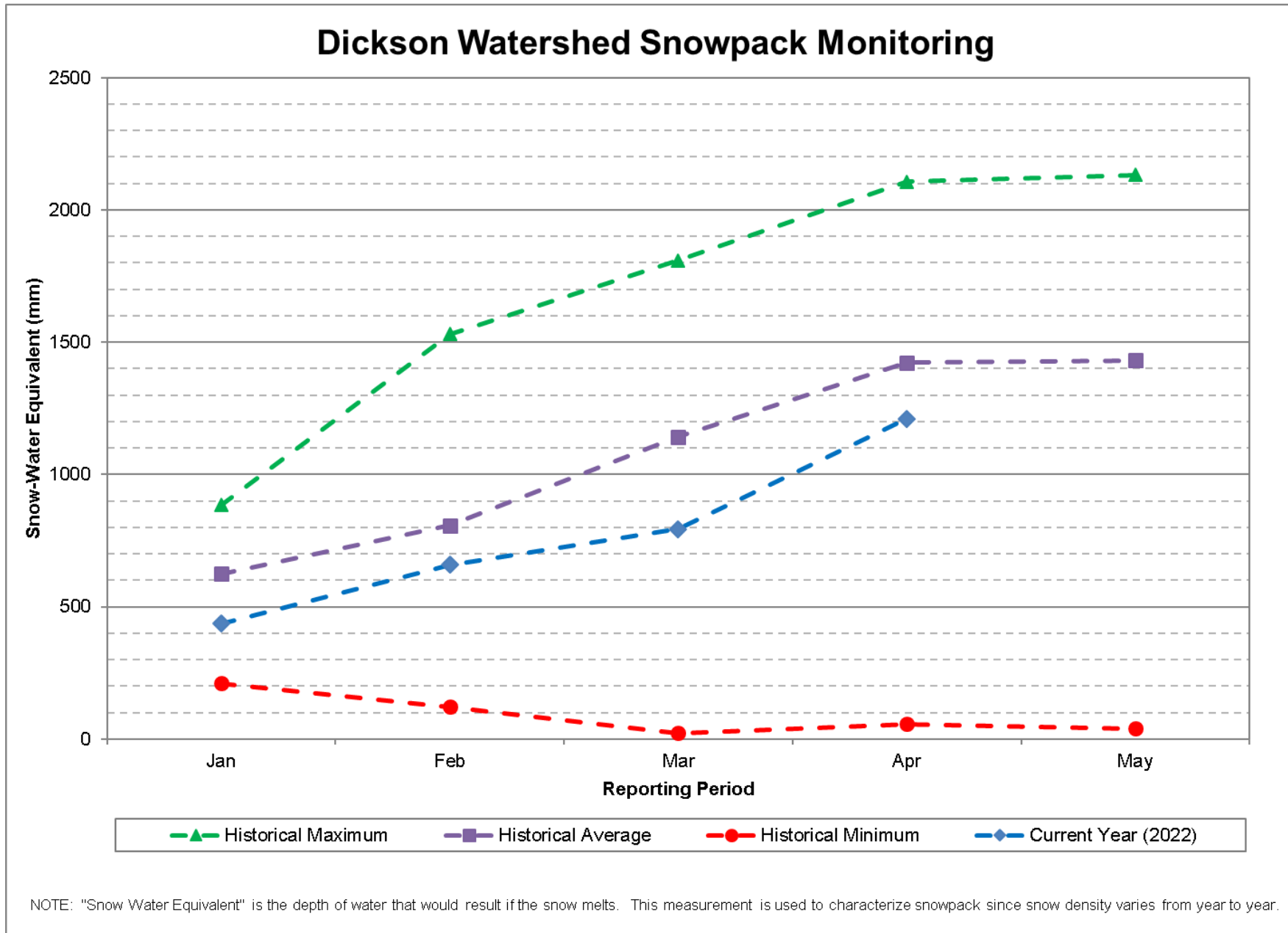
## APPENDIX F – CANNELL LAKE LEVEL



The majority of the Cannell Lake licensed water storage can be discharged by gravity from the lake. Approximately 88% of the storage volume is above an elevation of 274 m. The remaining 12% of storage volume, down to a lake level of 273.25 m, is available with the use of pumps. Historically, the lake level has never dropped to a level requiring use of pumps, but reached a low of 16% storage volume remaining in 2006. The 'Operations Drawdown Curve' is a tool used to predict whether the lake pumps will be required in the latter part of the year, when the lake is generally at its lowest level. When the actual lake level drops below the 'Operations Drawdown Curve' it is anticipated that pumping from the lake may be required.

The original water licenses for Cannell Lake allowed for average day withdrawals from the lake of 9.1 MLD, with no increase for maximum day withdrawals. An additional water license obtained in 2012 allows for an increase in the average day withdrawal of 2.7 MLD, bringing the total allowable average day withdrawal to 11.8 MLD. The new license also provided an increase in the allowable maximum day withdrawal by 60.0 MLD, thus when added to the original licenses, provides a total licensed maximum day withdrawal amount of 69.1 MLD. However, the license issued in 2012 is contingent on the lake level being above a certain elevation in the months of October through May (as outlined on the graph). If the lake level is below this line, the allowable withdrawal rate is limited to the 9.1 MLD of the original water licenses.

APPENDIX G – DICKSON LAKE SNOWPACK



# REPORT

---

To: Abbotsford Mission Water & Sewer Commission (WSC)

From: Jamie Austin, Director, Utility Operations

Date: May 12, 2022

Subject: Award of Contract 1220-2021-2654 - Supply and Delivery of Polymers for JAMES WWT Plant

Report No.: JSSC 022-2022

Attachment: None

---

## RECOMMENDATIONS

1. THAT Contract No. 1220-2021-2654 - Supply and Delivery of Polymers for JAMES WWT Plant be awarded to Waterhouse Environmental Services Corp. at an annual cost of \$391,521.60, plus GST, for three years, plus two optional one year extensions;
2. THAT the General Manager, Engineering and Regional Utilities, be authorized to approve all commitments and change orders to Waterhouse Environmental Services Corp. for the supply and delivery of polymers for the JAMES WWT Plant, within the approved budget, including applicable taxes; and
3. THAT the City of Abbotsford's Mayor and Corporate Officer be authorized to execute all documents related to this contract.

## PURPOSE

To award the contract for the Supply and Delivery of Polymers for JAMES WWT Plant. The scope of the contract is detailed in the Request for Proposals 1220-2021-2654 - Supply and Delivery of Polymers for JAMES WWT Plant.

## BACKGROUND

Two types of polymer are used at the JAMES Plant; for the centrifuges (powder) used to dewater the digested sludge and for the waste solids thickener (emulsion) used for thickening the waste activated sludge. The previous contract supply will end on August 31, 2022.

The Request for Proposals was posted on BC Bid on October 5, 2021 and closed for submissions on November 6, 2021. Five companies submitted proposals and were invited to perform benchtop trials using the James Plant sludge from both processes and provide pricing. The top three, based on performance and cost, were then invited to do full scale performance trials of their polymers on both processes.

## ANALYSIS

After completion of the full scale trials, the proponents pricing was revised to reflect actual performance of the proposed products. The revised pricing was applied to the evaluation criteria to establish the following ranking. Based on the performance trials, it is recommended to award the contract to Waterhouse Environmental Services Corp.

Proponent	Annual Cost	Ranking
<b><i>Waterhouse Environmental Services Corp.</i></b>	<b>\$391,521.60</b>	<b>1</b>
<i>Univar Solutions</i>	\$434,570.88	2
<i>Clartech Industries</i>	\$464,501.28	3

## FINANCIAL IMPLICATIONS

The raw product in polymer is derived from oil and subject to major price increases, as oil prices have risen. The existing 2022 Polymer Operating Budget is \$265,600; this budget will require an increase and will be submitted as a part of the 2023 - 2027 financial planning process. As the new contract and higher rates come into effect September 1, 2022, staff project an estimated 2022 polymer budget shortfall of \$41,974. This can be absorbed in the existing JAMES Plant operating budget and therefore no budget amendment will be required in 2022.

Year	Annual Cost	5 Year Contract Cost
2022	\$265,600*	-
2023 – 2027	\$391,522	\$1,957,608

\* New contract begins September 1, 2022.

**APPROVED**



By kbasatia at 11:54 am, Apr 26, 2022

Reviewed and approved by the:  
Chief Financial Officer, CoA

## SUMMARY

It is recommended that Contract 1220-2021-2654 - Supply and Delivery of Polymers for JAMES WWT Plant be awarded to Waterhouse Environmental Services Corp. based on overall ranking as scored through the Request for Proposal process, at an annual cost of \$391,521.60, plus GST, for three years, plus two optional one year contract extensions. A request for increase for the JAMES Plant Polymer Operating budget will be submitted as a part of the 2023 - 2027 financial planning process.

**APPROVED**



By jaustin at 6:27 am, Apr 26, 2022

Jamie Austin, B.Ss, AScT.  
Director, Utility Operations

**APPROVED**



By SChiu at 11:34 am, Apr 26, 2022

Stella Chiu, P. Eng.; M. Eng.; LEED AP  
Acting Director, Utilities Infrastructure

**APPROVED**



By risaac at 1:48 pm, Apr 26, 2022

Rob Isaac, P.L. Eng.  
General Manager, Engineering & Regional  
Utilities

## REPORT

---

To: Abbotsford Mission Water & Sewer Commission

From: Stella Chiu, Acting Director, Utilities Infrastructure  
Thomas Dueckman, Manager Civic Buildings

Date: April 21, 2022

Subject: Award of the Optional Scope of RFP 1220-2021-2675 – Construction Services – JAMES Wastewater Treatment Plant Roof Replacement

File: 5550-60

Report No.: JSSC 020-2022

Attachments: None

---

### RECOMMENDATION

THAT the Award of the Optional Scope of RFP 1220-2021-2675 – Construction Services – JAMES Wastewater Treatment Plant Roof Replacement, be awarded to Transwest Roofing Ltd., in the amount of \$210,652, plus GST.

### PURPOSE

To receive authorization for the award of the optional scope of RFP 1220-2021-2675 – Construction Services – JAMES Wastewater Treatment Plant Roof Replacement.

### BACKGROUND

Since 2016, the City of Abbotsford (City) monitors and tracks the condition of building assets owned by the City. The City inspects building systems such as roofs, to maintain the systems and estimate the remaining life left in a system before a renewal is required. Condition information and remaining service life is used to determine system replacement timelines and populate the annual capital project plan.

In 2020, City staff inspected the administration building roof of the JAMES Wastewater Treatment Plant and determined that the roof membranes were approaching the end of service life in multiple locations. The City verified the findings with a roofing consultant and began planning for the replacement. The priority roof sections, chosen for immediate replacement, include the roof elevations that cover the office area (Base Scope) and laboratory (Optional Scope) of the administration building.

## DISCUSSION / ANALYSIS

On November 15, 2021, the City posted a Request for Proposals (RFP) , 1220-2021-2675 - Construction Services - JAMES Wastewater Treatment Plant Roof Replacement, on the BC Bid and Bonfire Procurement Portal. This Request for Proposals closed on December 15, 2021.

Two (2) Proposals were received including, Transwest Roofing Ltd. And Parker Johnston Industries Ltd. The evaluation process was facilitated by the Purchasing department and reviewed by representatives from Civic Buildings and JAMES Plant operations teams. As stated in the RFP, the evaluation criteria was weighed as follows:

<b>Experience, Reputation and Resources</b>	<b>25 %</b>
<b>Technical; Approach and Methodology</b>	<b>25 %</b>
<b>Pricing Proposal</b>	<b>50 %</b>

The proponents ranked as followed:

<b>Proponent</b>	<b>Estimated Fees</b>	<b>Ranking</b>
TRANSWEST ROOFING LTD.	Base: \$ 146,217.00 Optional: \$177,317.00	<b>1</b>
PARKER JOHNSTON INDUSTRIES LTD.	Base: \$ 187,000.00 Optional: \$ 174,800.00	<b>2</b>

At the end of the evaluation process, Transwest Roofing Ltd. (Transwest) was the highest ranked proponent. Additionally, they are well experienced and are thought to provide the best total value for the AMWSC.

Following the evaluation, Transwest negotiated their proposal price to accommodate for unprecedented material cost increases, that occurred after the RFP closed. During the negotiation, Transwest provided supporting documentation for a 9% increase on the Base Scope price, increasing the cost to \$159,376.00, and a 7% increase on the Optional Scope, increasing the cost to \$191,502.00.

The Base Scope was approved by the General Manager, Engineering & Regional Utilities on April 14, 2022, as the City elected to proceed to keep the project schedule progressing, while seeking approval for the Optional Scope from the JSSC.

The current request is for the Optional Scope only, including an additional 10% for contingency.

Project for Approval	Transwest Roofing Adjusted Proposal Price	Total Optional Cost with 10% contingency
Optional Scope – Lab Roof	\$191,502	<b>\$210,652</b>

The combined value of the previously approved Base Scope, Optional Scope and 10% contingency for material cost increase is \$356,869, plus GST.

---

## FINANCIAL IMPLICATIONS

The 2022 Joint Sewer Capital Plan budget is identified below:

Project Description	ID Number	Capital Plan Budget
JAMES Plant Office Roof Replacement	22P-6704	\$324,000

Additional budget of \$32,900 is available to be transferred from the General, Asset Replacement, making the total budget available, \$356,900.

The project is within the available funding in the Joint Sewer Capital Plan.

## COMMUNICATION PLAN

N/A

## SUMMARY

The City issued a public invitation for proponents to submit proposals for RFP 1220-2021-2675– Construction Services – JAMES Wastewater Treatment Plant Roof Replacement. The lead proponent negotiated a proposal price increase based on verified market increases to roofing materials. The City approved the Base Scope of the project to keep the schedule progressing while seeking approval of the Optional Scope. Staff recommend that Award of the Optional Scope of RFP 1220-2021-2675 – Construction Services – JAMES Wastewater Treatment Plant Roof Replacement, be awarded to Transwest Roofing Ltd., in the amount of \$210,652.00, plus GST.

**APPROVED**



By tdueckma at 10:50 am, Apr 22, 2022

---

Thomas Dueckman  
Manager, Civic Buildings

**APPROVED**



By SChiu at 11:00 am, Apr 22, 2022

---

Stella Chiu, P.Eng., M.Eng., LEED AP  
Acting Director, Utilities Infrastructure

**APPROVED**



By risaac at 4:20 pm, Apr 22, 2022

---

Rob Isaac, P.L.Eng.  
General Manager, Engineering & Regional  
Utilities



# REPORT

---

To: Joint Shared Services Committee (JSSC)

From: Michael Schwanke, Project Engineer

Date: April 29, 2022

Subject: Award of RFP No. 1220-2022-2746 JAMES Plant Trickling Filter 1, Cell 4 Repair and Media Replacement Project

File: 5330-70

Report No.: JSSC 023-2022

---

## RECOMMENDATIONS

1. THAT RFP No. 1220-2022-2746 - JAMES Plant Trickling Filter 1, Cell 4 Repair and Media Replacement Project, be awarded to Polycrete Restorations Ltd., in the amount of \$1,182,653, plus GST, which includes base scope of work and optional items;
2. THAT the General Manager of Engineering and Regional Utilities be authorized to approve all commitments and change orders to Polycrete Restorations Ltd., for the JAMES Plant Trickling Filter 1, Cell 4 Repair and Media Replacement Project, within the approved project budget, including applicable taxes; and
3. That the City of Abbotsford's Mayor and Corporate Officer be authorized to execute all documents related to this contract.

## PURPOSE

In April 2022, Request for Proposal (RFP) 1220-2022-2746 – JAMES Plant Trickling Filter 1, Cell 4 Repair and Media Replacement Project was posted to BC Bid. Only one proposal was received and it is recommended that RFP 1220-2022-2746 be awarded to the sole proponent.

## BACKGROUND

The JAMES Plant secondary treatment process includes two rectangular trickling filters (TFs). The TFs are above ground concrete structures that contain plastic media over which wastewater is distributed. Dissolved organics are absorbed on biomass that grows on the media and particles

are filtered out or trapped. Trickling Filter 1 (TF1) is segmented into four cells and each can be removed from service independently.

In 1989, TF1 was installed and contains its original 60° cross flow corrugated plastic media. The media has exceeded its expected service life and replacement is required. The media in Cell 1, Cell 2 and Cell 3 was replaced in 2016, 2019 and 2021, respectively. The scope of work in this Contract includes the removal and disposal of old media in Cell 4 and installation of new media purchased through RFQ 1220-2022-2729 and awarded at the March 10, 2022 JSSC meeting. Concrete repairs will be performed following the removal of the old media and the completion of a condition assessment by WSP Canada Inc. (WSP), the engineering consultant for this project.

## DISCUSSION / ANALYSIS

On March 22, 2022, RFP No. 1220-2022-2746 - JAMES Plant Trickling Filter 1, Cell 4 Repair and Media Replacement Project was posted to BC Bid. On closing date, April 21, 2022, only one proposal was received from Polycrete Restorations Ltd. (Polycrete). WSP reviewed the proposal for completeness and compliance with the RFP documents and did not find any issues.

Polycrete’s proposal included the following costs:

Item	Cost (excluding GST)
Base Scope	\$992,227
Concrete Repair Scope	\$190,426
Total cost	\$1,182,653

The cost of Cell 4 has increased by approximately 25% over the cost of Cell 3 that was completed in 2021. This is a reasonable increase in costs as the scope of work for Cell 4 has increased due to the configuration of the cell and significant inflation in the construction industry. Overall, the pricing reflects the proposed scope of work under the current market conditions.

Polycrete’s experienced team completed the media replacement and repairs in Cells 1, 2 and 3 of Trickling Filter 1. Polycrete’s experience of working around the wastewater treatment plant, safe handling of biological waste, working within a hazardous workspace and proposed work plan demonstrates that it has the expertise required to complete this project.

## FINANCIAL IMPLICATIONS

The Joint Wastewater Capital Program includes the following budgets:

Capital Project ID	Description	Budget
18P-4550	Trickling Filter Media (cell 4)	\$1,910,000
Auto-2790	General, Asset Replacement (TF#1 – Mechanical Piping)	\$104,000
10187	General, Asset Replacement	\$348,100
<b>Total</b>		<b>\$2,362,100</b>

The estimated budget allocation of these funds is as follows:

Budget	This Award (excluding GST)	Awarded to Date	Remaining Budget
\$2,362,100	\$1,182,653	\$1,133,331.80	\$46,115.20

There is sufficient budget to award RFP 1220-2022-2746.

**APPROVED**



By kbasatia at 10:10 am, May 02, 2022

Reviewed and approved by the:  
Chief Financial Officer, COA

## COMMUNICATION PLAN

None required.

## SUMMARY

The proposal from the sole proponent, Polycrete Restoration Ltd., is compliant with the Request for Proposal. Staff recommends that RFP No. 1220-2022-2746 - JAMES Plant Tricking Filter 1, Cell 4 Repair and Media Replacement Project, be awarded to Polycrete Restorations Ltd., in the amount of \$1,182,653, plus GST, which includes base scope of work and optional items.

**APPROVED**



By mschwank at 4:23 pm, Apr 29, 2022

Michael Schwanke, P.Eng.  
Project Engineer

**APPROVED**



By SChiu at 9:20 am, May 02, 2022

Stella Chiu, P. Eng., M. Eng.; LEED AP  
Acting Director - Utilities Infrastructure

**APPROVED**



By ddriedger at 4:39 pm, May 02, 2022

Don Driedger, P.Eng.  
Senior Manager, Projects

**APPROVED**



By nkoning at 8:53 am, May 03, 2022

Nathan Koning, P.Eng.  
Director, Projects & Development Engineering

**APPROVED**



By risaac at 10:06 am, May 03, 2022

Rob Isaac, P.L.Eng.  
General Manager, Engineering & Regional  
Utilities

MS/jm

# REPORT

---

To: Abbotsford Mission Water & Sewer Commission (WSC)

From: Sabrina Grewal, Manager, Financial Planning & Accounting (Abbotsford)

Date: April 27, 2022

Subject: Financial Statements – March 2022

File: 1830-03

Report No.: JSSC 021-2022

Appendices: A – Water Operating Statement  
B – JAMES Plant Operating Statement  
C – Joint Water Capital Statement  
D – Joint Water Major Projects Status  
E – JAMES Plant Capital Statement  
F – JAMES Plant Major Projects Status

---

## **WATER & SEWER COMMISSION (WSC) RECOMMENDATION**

THAT Report No. JSSC 021-2022, dated April 22, 2022 from the Manager, Financial Planning & Accounting (Abbotsford), regarding Financial Statements – March 2022, be received.

## **DISCUSSION**

The attached preliminary statements present the operating and capital financial activities for the three-month period ended March 31, 2022. 2022 projections will be provided beginning with the June 2022 financial statements.

## **SUMMARY**

Overall, operating and capital financial activities for water and sewer are within the approved WSC plan for the year.

## **ANALYSIS**

### **Water Operating**

Overall, expenditures are \$191,000 lower than at March 2021.

#### **Summary of Revenue Variances**

- There is no significant variance in revenue to date

#### **Summary of Expenditure Variances**

- General services: Lower than last year by \$62,000
  - Lower salaries and benefits due to vacancies
- Maintenance: Lower than last year by \$137,000
  - Due to timing of charges compared to last year

### **Sewer Operating**

Expenditures are \$118,000 higher than Q1 2021.

#### **Summary of Expenditures Variances**

- Wastewater Operations: \$38,000 higher than March 2021
  - \$25,000 credit for manual pay adjustment in salaries and benefits last year
  - \$8,000 higher departmental supplies
- Wastewater Maintenance: \$59,000 higher than March 2021
  - Higher in Q1 2022 due to POs that could not be completed last year due to transportation and covid-19 related delays last year
- Biosolids Mananagement: \$111,000 higher than March 2021
  - Biosolids hauled more through Q1 due to estimated 2500 wet tonnes of biosolids carried over from 2021 due to highway road closures as a result of the weather event in November 2021.

### **Water Capital**

Water capital expenditures are currently within the approved budget for 2022. A total of \$70,000 was spent at March 31 on projects with a total budget of \$2.1 million. The 2022 approved (amended) capital budget is \$4.3 million.

#### **Major Project Highlights**


- Water Supply Expansion (budget of \$2 million): Planning phase – target completion date of planning phase is Q4 2022;
- Townline Wellfield Infrastructure Renewal (budget of \$1.7 million): Groundwater exploration for replacement Townline 1 well is underway. Target completion Q4 2023;
- Norrish Filtration – Removal of old Norrish Intake (budget of \$1.4 million): Detailed design & permitting is underway with construction anticipated to begin in late summer 2023. Target completion Q4 2023.

### **Sewer Capital**

Sewer capital expenditures are currently within budget for 2022. A total of \$64,000 was spent at March 31 on projects with a total budget of \$2.8 million. The 2022 approved (amended) capital budget is \$6.95 million.


**Major Project Highlights**

- General Miscellaneous Repairs to Concrete Tanks and Channels (budget of \$2.49 million): Design phase – target completion is Q4 2022.
- Trickling Filter Media Replacement (budget of \$2.0 million): design completed and construction in progress. Target completion date is Q4 2022;
- Matsqui Dyke Sinkhole: (budget of \$1.15 million) - Currently in the design phase – Target completion Q1 2023

**APPROVED**   
By skgrewal at 10:09 am, May 03, 2022


---

Sabrina Grewal, CPA  
Manager, Financial Planning & Accounting,  
Finance & Procurement Services

**APPROVED**   
By kbasatia at 9:41 am, May 03, 2022

---

Komal Basatia, CPA, CGA  
General Manager, Finance & Procurement Services

**APPROVED**   
By risaac at 11:31 am, May 04, 2022

---

Rob Isaac, P.L. Eng  
General Manager, Engineering & Regional Utilities

**ABBOTSFORD / MISSION WATER OPERATING****Statement of Financial Activities***For the Period ended March 31, 2022**In thousands*

	WSC			
	Approved Plan	2022 YTD	2021 YTD	Variance Actual/Plan
<b>REVENUE</b>				
Leases	\$ 50	\$ 23	\$ 23	-54%
Other revenue	21	-	-	-100%
Recoveries	-	-	-	
	71	23	23	-68%
<b>EXPENDITURE</b>				
General services	2,691	361	423	-87%
Water conservation	374	12	17	-97%
Lab supplies, sampling and analysis	211	34	57	-84%
Inspections	327	44	67	-87%
Maintenance	1,348	302	439	-78%
Treatment and disinfection	227	55	33	-76%
Utilities	608	106	69	-83%
	5,787	914	1,105	-84%
<b>Municipal Contribution Required</b>	(5,716)	(891)	(1,082)	-84%
Abbotsford (2021 Actual = 77.90%)	(4,424)	(694)	(837)	
Mission (2021 Actual = 22.10%)	(1,292)	(197)	(245)	
	\$ (5,716)	\$ (891)	\$ (1,082)	

**ABBOTSFORD / MISSION JAMES PLANT OPERATING****Statement of Financial Activities***For the Period ended March 31, 2022**In thousands*

	WSC			Variance
	Approved	2022	2021	Actual/
	Plan	YTD	YTD	Plan
<b>REVENUE</b>				
Industrial Extra Strength	\$ 1,301	\$ -	\$ -	-100%
Disposal Fees	61	66	43	8%
Recoveries	-	-	-	
	<u>1,362</u>	<u>66</u>	<u>43</u>	<u>-95%</u>
<b>EXPENDITURE</b>				
<b>General</b>				
General services	1,698	364	380	-79%
General plant maintenance	386	84	76	-78%
	<u>2,084</u>	<u>448</u>	<u>456</u>	<u>-79%</u>
<b>Wastewater Treatment</b>				
Operations	1,954	392	354	-80%
Maintenance	924	226	167	-76%
	<u>2,878</u>	<u>618</u>	<u>521</u>	<u>-79%</u>
<b>Environmental Management</b>				
Wastewater testing and analysis	688	135	155	-80%
Biosolids management	635	185	74	-71%
	<u>1,323</u>	<u>320</u>	<u>229</u>	<u>-76%</u>
	<u>6,285</u>	<u>1,386</u>	<u>1,206</u>	<u>-78%</u>
<b>Municipal Contribution Required</b>				
	<u>(4,923)</u>	<u>(1,320)</u>	<u>(1,163)</u>	<u>-73%</u>
Abbotsford (2021 Actual = 80.36%)	(3,964)	(1,061)	(936)	
Mission (2021 Actual = 19.64%)	(959)	(259)	(227)	
	<u>\$ (4,923)</u>	<u>\$ (1,320)</u>	<u>\$ (1,163)</u>	

**ABBOTSFORD / MISSION WATER CAPITAL**

**Statement of Financial Activities**

For the period ended March 31, 2022

Capital Expenditures	Key	WSC		2022	Revenue		Expenses		DCC Eligible	
		Approved Plan	Amended Plan		YTD	Abbottsford	Mission	Abbottsford		Mission
		Non-DCC Eligible				77.90%		22.10%		
<b>DCC Eligible</b>										
1	CF - Water Supply Expansion - Planning, approvals and design	\$ -	\$ 36,000	\$ -	\$ -	\$ -	\$ -	\$ -	-	100%
2	CF - Update Joint Water Master Plan	-	56,000	-	-	-	-	-	-	50%
3	New Supply - Construction, Engineering Services and Commissioning	2,000,000	-	-	-	-	-	-	-	100%
<b>Total DCC Eligible</b>		<b>\$ 2,000,000</b>	<b>\$ 92,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>	
<b>Non-DCC Eligible</b>										
4	CF - AC & PCCP Transmission Main Condition Assessment	\$ -	\$ 350,000	\$ -	\$ -	\$ -	\$ -	\$ -	-	
5	CF - Aging Asset R&R - Townline Wellfield Renewal	355,000	1,629,000	6,495	-	-	5,060	1,435	-	
6	CF - Chloramination Monitoring Analyzers Installation	-	117,000	-	-	-	-	-	-	
7	CF - Dickson Dam Remediation	-	500,000	-	-	-	-	-	-	
8	CF - Electrical Arc Flash Safety Joint Water(Shared Project)	-	13,000	163	-	-	127	36	-	
9	CF - Emergency Response Plan Update	-	100,000	-	-	-	-	-	-	
10	CF - Impressed Current Cathodic Protection (ICCP) System Repairs	200,000	100,000	-	-	-	-	-	-	
11	CF - Infrastructure Renewal - Marshall Wells	-	82,000	(1,539)	-	-	(1,199)	(340)	-	
12	CF - Maclure Watermain ICCP System	-	101,000	-	-	-	-	-	-	
13	CF - Maclure Cell No. 1 Condition Assessment	-	50,000	-	-	-	-	-	-	
14	CF - Norrish Creek Intake Removal and Gravel Extraction	1,347,000	50,000	7,559	-	-	5,888	1,671	-	
15	CF - Norrish Crown Tenure Application Support	-	50,000	-	-	-	-	-	-	
16	CF - Norrish WTP Elec/GE PLC Architecture Review & Upgrade	-	50,000	-	-	-	-	-	-	
17	CF - Norrish WTP Membrane System Feed Flow Control Study	-	200,000	-	-	-	-	-	-	
18	CF - Norrish WTP SCADA Upgrade to VTScada	-	111,000	44,581	-	-	34,729	9,852	-	
19	CF - Norrish WTP SSF #3 & 4 Flowmeter Replacement	-	75,000	-	-	-	-	-	-	
20	CF - Pickup, Jointwater JW214 - 09 Ford Ranger	-	33,000	-	-	-	-	-	-	
21	CF - Pickup Truck 6 - Replacement	-	27,000	-	-	-	-	-	-	
22	CF - Pickup Truck 3 - Replacement	-	20,000	-	-	-	-	-	-	
23	CF - SCADA Radio & Network Switches Upgrade JW (Shared)	-	16,000	2,646	-	-	2,061	585	-	
24	CF - Seismic Study and Design Guidelines	-	125,000	-	-	-	-	-	-	
25	CF - System pH Control Planning Studies & Conceptual Designs	250,000	193,000	10,247	-	-	7,982	2,265	-	
26	CF - Transmission Main Appurtenances Condition Assess.	-	200,000	-	-	-	-	-	-	
27	CF - Water Quality Program Review (Shared Project)	-	50,000	-	-	-	-	-	-	
28	Aging Asset R&R - Mt. Mary Ann Reservoir Crack Repairs	560,000	-	-	-	-	-	-	-	
29	Aging Asset R&R - Norrish WTP Dumper (20-yr cycle)	50,000	-	-	-	-	-	-	-	
30	Aging Asset R&R - Norrish WTP Skimmer (20-yr cycle)	239,000	-	-	-	-	-	-	-	
31	Aging Asset R&R - Pine Well Decommissioning	80,000	-	-	-	-	-	-	-	
32	AMWSC Water Quality Monitoring Improvements	200,000	-	-	-	-	-	-	-	
33	Cannell System Storage, Transmission, and Treatment Improvements	250,000	-	-	-	-	-	-	-	
34	Cannell Watershed Studies as per 2020 WMP Update	100,000	-	-	-	-	-	-	-	
35	Eastern Wellfields Renewal	402,000	-	-	-	-	-	-	-	
36	Joint Water Contingency	500,000	-	-	-	-	-	-	-	
37	Norrish WTP Chlorine Rotameter Replacement	200,000	-	-	-	-	-	-	-	
38	Norrish WTP Clearwell Outlet Valve Actuator	50,000	-	-	-	-	-	-	-	
39	Norrish WTP SSF Filter Outlet Valve Upgrade	50,000	-	-	-	-	-	-	-	
40	Recalibration of Hydrogeological Model	75,000	-	-	-	-	-	-	-	
41	Remote Communications for Norrish WTP	30,000	-	-	-	-	-	-	-	
<b>Total Non-DCC Eligible</b>		<b>\$ 4,938,000</b>	<b>\$ 4,242,000</b>	<b>\$ 70,152</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 50,661</b>	<b>\$ 14,372</b>		

Total

\$	6,938,000	\$	4,334,000	\$	70,152	\$	-	\$	-	\$	50,661	\$	14,372
----	-----------	----	-----------	----	--------	----	---	----	---	----	--------	----	--------

District of Mission Amount (Net of Revenue): \$ 14,372.25

## Joint Water Major Projects Status

Key	Project	Description	2021 Budget	Study/Design/Construction Project Status (as of Mar 31, 2022)	Anticipated Completion
1,3	Water Supply Expansion	Planning, design/permitting, and construction of new water source.	\$2,036,000	In planning phase	Current Phase – Q4 2022
5	Townline Wellfield Infrastructure Renewal	Re-drilling of Townline 1 and replacement of pump stations for both Townline 1 and 2.	\$1,629,000	Groundwater exploration for replacement Townline 1 well underway.	Q2 2023
7	Dickson Water Control Facility Remediation	Dam upgrades or replacement to meet dam safety hydrotechnical and seismic criteria	\$500,000	Planning phase.	Current phase – Q4 2022
14	Old Norrish Intake Decommissioning	Removal of old Norrish Intake weir, which is impeding proper operation of upstream 'new' intake.	\$1,397,000	Detailed design & permitting underway; construction anticipated late summer 2023.	Q4 2023
25	System pH Control Planning & Conceptual Designs	Planning studies to support pH control design criteria and then conceptual designs for new (Cannell source) or upgraded (Norrish source) treatment infrastructure.	\$443,000	Planning studies underway and anticipated to be complete by end of 2022.	Q4 2023
28	Mt. Mary Ann Reservoir Crack Repairs	Repair of cracks in Mt. Mary Ann Reservoir and adding HDPE liner.	\$560,000	Design underway; construction anticipated Winter 2022/2023.	Q1 2023
35	Eastern Wellfields Renewal	Planning, design/permitting, and construction to renew/replace Industrial, Riverside, and McConnell wells' aging infrastructure and improve treated water quality.	\$402,000	RFP to be released in May 2022 for hydrogeological investigations.	Planning Phase – Q2 2023

## Appendix D

Appendix E

**ABBOTSFORD / MISSION JAMES PLANT CAPITAL  
Statement of Financial Activities**

DCC Eligible - Flow	78.07%	21.93%
DCC Eligible - Load	85.76%	14.24%
Non-DCC Eligible	80.36%	19.64%

For the period ended March 31, 2022

Key	WSC		2022	Revenue		Expenses		DCC
	Approved Plan	Amended Plan	YTD	Abbotsford	Mission	Abbotsford	Mission	Eligible
<b>DCC Eligible - Flow</b>								
1	\$ -	\$ 541,000	\$ 21,867	\$ -	\$ -	\$ 17,337.16	\$ 4,530.09	47%
2	362,000	-	-	-	-	-	-	50%
<b>DCC Eligible - Load</b>								
	-	-	-	-	-	-	-	50%
<b>Total DCC Eligible</b>	<b>\$ 362,000</b>	<b>\$ 541,000</b>	<b>\$ 21,867</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 17,337</b>	<b>\$ 4,530</b>	
<b>Non-DCC Eligible</b>								
3	\$ -	\$ 246,000	\$ -	\$ -	\$ -	\$ -	\$ -	
4	-	10,000	-	-	-	-	-	
5	-	100,000	-	-	-	-	-	
6	-	381,000	-	-	-	-	-	
7	-	168,000	-	-	-	-	-	
8	-	104,000	-	-	-	-	-	
9	-	23,000	288	-	-	231	57	
10	-	189,000	-	-	-	-	-	
11	-	799,000	10,053	-	-	8,079	1,974	
12	-	1,962,000	3,400	-	-	2,732	668	
13	-	68,000	-	-	-	-	-	
14	-	1,079,000	-	-	-	-	-	
15	-	637,000	-	-	-	-	-	
16	-	104,000	-	-	-	-	-	
17	-	324,000	-	-	-	-	-	
18	-	67,000	-	-	-	-	-	
19	-	100,000	-	-	-	-	-	
20	-	24,000	-	-	-	-	-	
21	-	29,000	-	-	-	-	-	
22	528,000	-	-	-	-	-	-	
23	500,000	-	-	-	-	-	-	
24	307,000	-	-	-	-	-	-	
25	-	-	1,152	-	-	926	226	
26	350,000	-	-	-	-	-	-	
27	-	-	27,643	-	-	22,214	5,429	
28	1,910,000	-	-	-	-	-	-	
29	25,000	-	-	-	-	-	-	
<b>Total Non-DCC Eligible</b>	<b>\$ 3,620,000</b>	<b>\$ 6,414,000</b>	<b>\$ 42,536</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 34,182</b>	<b>\$ 8,354</b>	
<b>Total</b>	<b>\$ 3,982,000</b>	<b>\$ 6,955,000</b>	<b>\$ 64,403</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 51,519</b>	<b>\$ 12,884</b>	

District of Mission Amount (Net of Revenue): **\$ 12,884.06**

**JAMES Plant Major Projects Status**

<b>Key</b>	<b>Project</b>	<b>Description</b>	<b>2022 Budget</b>	<b>Study/Design/ Construction Project Status (as of Dec 31, 2021)</b>	<b>Anticipated Completion Date</b>
1	Electrical, Add 500 kW Standby Generator #2	Add a second 500 kW standby Generator #2 at the JAMES Plant, and a new generator diesel fuel storage tank.	\$541K	Design – 30%	Quarter 4 2022
3	Biosolids Management Plan	Study to further review technologies for solids treatment, handling, and management issues, and pending changes in OMRR and impact to end use plan	\$246K	Study – 30%	Quarter 3 2022
8,28	Trickling Filter #1 Media Replacement (Cell 4)	Replace media in Cell 4 of Trickling Filter (TF) #1; inspect TF and repair as required	\$2.014M	Design – 100% Construction – 0%	Quarter 4 2022
11	General, Clarifier #1 Process Mechanism	Inspect and repair/replace mechanism in Secondary Clarifier #1	\$799K	Inspection – 100% Design – 100% Construction – 5%	Quarter 3 2022
31	Matsqui Dyke Sinkhole – Full Repair	Further investigate the cause of the sinkhole; engineering design and construction to perform a full repair to the dyke.	\$1.15M	Design – 0%	Quarter 1 2023
39	General, Miscellaneous Repairs to Concrete Tanks and Channels	Inspect, design and repair miscellaneous concrete tanks and channels as required	\$2.49M	Design – 100%	Quarter 4 2022

# REPORT

---

To: Abbotsford/Mission Water & Sewer Commission (WSC)

From: Sabrina Grewal, Manager, Financial Planning & Accounting (Abbotsford)

Date: April 27, 2022

Subject: Draft 2021 Year-End Financial Statements – Unaudited

File: 1830-01

Report No.: JSSC 025-2022

Appendices: A – Water Operating Statement  
B – JAMES Plant Operating Statement  
C – Joint Water Capital Statement  
D – Joint Water Major Projects Status  
E – JAMES Plant Capital Statement  
F – JAMES Plant Major Projects Status

---

## **WATER & SEWER COMMISSION (WSC) RECOMMENDATION**

THAT Report No. JSSC 025-2022, dated April 27, 2022 from the Manager, Financial Planning & Accounting, regarding Draft 2021 Year-End Financial Statements – Unaudited, be received.

## **DISCUSSION**

The attached preliminary statements present the operating and capital financial activities for the twelve-month period ended December 31, 2021.

## **SUMMARY**

Overall, operating and capital financial activities for water and sewer were within the approved WSC plan for the year. The required municipal contribution for both water and sewer operations were lower than planned, respectively, as listed below:

- Water Operating \$4,950,000 - \$472,000 favourable variance
- Sewer Operating \$3,871,000 - \$1,223,000 favourable variance

## **ANALYSIS**

### **Water Operating**

Overall, there was a net favourable variance in water operating of \$467,000.

#### **Summary of Unaudited Revenue Variances**

- \$7,000 unfavourable variance in revenue over the approved WSC plan

#### **Summary of Unaudited Expenditure Variances**

- General Services: Favourable \$528,000
  - \$280,000 vacancies & salary costs
  - \$123,000 internal labour & equipment
  - \$100,000 reduced Bevan Wells Monitoring
- Water Conservation: Favourable \$188,000
  - \$175,000 Rebate Program - Lower uptake on rebate program
- Maintenance: Unfavourable \$358,000
  - \$130,000 PRV & Flow Control Stations – upgrade works on Maclure Reservoir
  - \$90,000 Cannell Lake UV Water Treatment Plant – extra maintenance work and replacement of sensors, lamps and other parts
  - \$78,000 contract services due to well 3 maintenance required
  - \$63,000 Supply Mains & Valves
  - Offset by \$112,000 decrease in Water Treatment Plan internal labour
- Utilities: Favourable \$135,000
  - Lower costs during the year than budgeted

## **Sewer Operating**

A \$1,223,000 favourable variance in the required municipal contribution for sewer operating was made up of \$527,000 in revenue and \$696,000 in expenditures.

### **Summary of Unaudited Revenue Variances**

- Industrial Extra Strength: Favourable \$114,000
  - Higher than planned
- Disposal fees: Favourable \$405,000
  - More visits by septage haulers than planned due to temporary acceptance of Chilliwack Septage due to Chilliwack plant closure

### **Summary of Unaudited Expenditure Variances**

- Wastewater Treatment Operations & Maintenance: Favourable \$556,000
  - \$176,000 lower utilities consumption – down due to pasteurization system out of service
- Environmental Management: Favourable \$87,000
  - \$55,000 Flood event and subsequent road closures and winter weather conditions resulted in approx. 2,800 tonnes of Biosolids not hauled off-site between November 15<sup>th</sup> and December 31<sup>st</sup>

## **Water Capital**

Water capital project expenditures were within budget for 2021 with total spending of \$647,000. The 2021 approved capital budget was \$8.1 million; Projects underway at December 31<sup>st</sup>, 2021 have \$3.9 million in budgeted costs.

### **2021 Major Project Highlights**

- Water Supply Expansion: (budget of \$1.1 million) Planning phase – next phase of hydrogeological and geotechnical investigation. Target completion for current phase is Q4 2022.
- Townline Wellfield Infrastructure Renewal: (budget of \$1.7 million) Groundwater exploration underway. Target completion Q2 2023.
- Norrish Filtration: (budget of \$937K) Detailed design underway. Target completion Q4 2023.

## **Sewer Capital**

Sewer capital expenditures were within budget for 2021. Costs across all projects for the year were \$2.9 million. The 2021 approved capital budget was \$20.4 million, and Projects underway at December 31<sup>st</sup>, 2021 have \$8.3 million in budgeted costs.

## 2021 Major Project Highlights

- General Miscellaneous Repairs to Concrete Tanks and Channels (budget of \$2.1 million): Design is complete. Target completion Q2 2022.
- Matsqui Dyke Sinkhole – Full Repair: (budget of \$1.15 million) – Design is underway. Target completion of Q1 2023.
- Refurbish Pasteurization Tanks (budget of \$1.02 million): Project is on hold until after the Biosolids Management Plan is complete.

**APPROVED**



By skgrewal at 12:10 pm, Apr 27, 2022

---

Sabrina Grewal, CPA  
Manager, Financial Planning & Accounting,  
Finance & Procurement Services

**APPROVED**



By kbasatia at 9:42 am, May 03, 2022

---

Komal Basatia, CPA, CGA  
General Manager, Finance & Procurement Services

**APPROVED**



By risaac at 11:29 am, May 04, 2022

---

Rob Isaac, P.L. Eng  
General Manager, Engineering & Regional Utilities

**ABBOTSFORD / MISSION WATER OPERATING****Statement of Financial Activities***For the Period ended December 31, 2021**In thousands*

	WSC			
	Approved	2021	2020	Variance
	Plan	YTD	YTD	Actual/Plan
<b>REVENUE</b>				
Leases	\$ 50	\$ 52	\$ 52	4%
Other revenue	21	26	16	24%
Recoveries	-	-	-	
	71	78	68	10%
<b>EXPENDITURE</b>				
General services	2,530	2,002	2,008	-21%
Water conservation	340	152	173	-55%
Lab supplies, sampling and analysis	211	297	234	41%
Inspections	327	278	248	-15%
Maintenance	1,267	1,625	1,731	28%
Treatment and disinfection	227	217	158	-5%
Utilities	592	457	491	-23%
	5,493	5,028	5,043	-8%
<b>Municipal Contribution Required</b>	(5,422)	(4,950)	(4,975)	-9%
Abbotsford (2020 Actual = 77.40%)	(4,160)	(3,831)	(3,817)	
Mission (2020 Actual = 22.60%)	(1,262)	(1,119)	(1,158)	
	\$ (5,422)	\$ (4,950)	\$ (4,975)	

**ABBOTSFORD / MISSION JAMES PLANT OPERATING****Statement of Financial Activities***For the Period ended December 31, 2021**In thousands*

	WSC			Variance
	Approved	2021	2020	Actual/
	Plan	YTD	YTD	Plan
<b>REVENUE</b>				
Industrial Extra Strength	\$ 1,301	\$ 1,415	\$ 1,449	9%
Disposal Fees	119	524	256	340%
Recoveries	-	8	87	
	1,420	1,947	1,792	37%
<b>EXPENDITURE</b>				
<b>General</b>				
General services	1,774	1,755	1,489	-1%
General plant maintenance	357	323	362	-10%
	2,131	2,078	1,851	-2%
<b>Wastewater Treatment</b>				
Operations	1,940	1,715	1,707	-12%
Maintenance	1,136	804	874	-29%
	3,075	2,519	2,581	-18%
<b>Environmental Management</b>				
Wastewater testing and analysis	691	659	604	-5%
Biosolids management	617	562	680	-9%
	1,308	1,221	1,284	-7%
	6,514	5,818	5,716	-11%
<b>Municipal Contribution Required</b>				
	(5,094)	(3,871)	(3,924)	-24%
Abbotsford (2020 Actual = 80.52%)	(4,096)	(3,117)	(3,155)	
Mission (2020 Actual = 19.48%)	(998)	(754)	(769)	
	\$ (5,094)	\$ (3,871)	\$ (3,924)	

**ABBOTSFORD / MISSION WATER CAPITAL  
Statement of Financial Activities**

For the period ended December 31, 2021

DCC Eligible 79.44% 20.56%  
Non-DCC Eligible 77.40% 22.60%

Key	WSC		2021 YTD	Revenue		Expenses		2021 Projection	DCC Eligible
	Approved Plan	Amended Plan		Abbotsford	Mission	Abbotsford	Mission		
<b>DCC Eligible</b>									
1	\$ -	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100%
2	-	63,000	6,900	-	-	5,411	1,489	10,000	50%
3	-	111,000	74,975	-	-	59,561	15,415	100,000	100%
<b>Total DCC Eligible</b>	<b>\$ -</b>	<b>\$ 1,174,000</b>	<b>\$ 81,875</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 64,972</b>	<b>\$ 16,904</b>	<b>\$ 110,000</b>	
<b>Non-DCC Eligible</b>									
4	\$ -	\$ 60,000	\$ 58,870	\$ -	\$ -	\$ 45,565	\$ 13,305	\$ 58,870	
5	1,600,000	1,745,000	115,589	-	-	89,466	26,123	150,000	
6	-	-	18,162	-	-	14,057	4,105	18,162	
7	-	-	4,168	-	-	3,226	942	4,168	
8	-	78,000	-	-	-	-	-	-	
9	-	60,000	-	-	-	-	-	-	
10	-	154,000	-	-	-	-	-	-	
11	-	100,000	-	-	-	-	-	-	
12	-	58,000	57,434	-	-	44,454	12,980	58,000	
13	-	100,000	-	-	-	-	-	-	
14	-	102,000	19,808	-	-	15,332	4,477	102,000	
15	-	101,000	-	-	-	-	-	-	
16	250,000	330,000	-	-	-	-	-	-	
17	-	937,000	117,883	-	-	91,242	26,642	150,000	
18	-	65,000	9,737	-	-	7,536	2,201	9,737	
19	-	126,000	287	-	-	222	65	287	
20	-	33,000	-	-	-	-	-	-	
21	-	500,000	-	-	-	-	-	5,000	
22	-	-	1,895	-	-	1,467	428	1,895	
23	150,000	200,000	-	-	-	-	-	-	
24	-	-	-	-	-	-	-	-	
25	-	-	-	-	-	-	-	-	
26	-	27,000	-	-	-	-	-	-	
27	-	30,000	29,742	-	-	23,020	6,722	29,742	
28	-	50,000	-	-	-	-	-	-	
29	500,000	500,000	-	-	-	-	-	-	
30	350,000	350,000	-	-	-	-	-	-	
31	250,000	250,000	-	-	-	-	-	-	
32	250,000	250,000	57,074	-	-	44,175	12,899	70,000	
33	200,000	200,000	-	-	-	-	-	-	
34	125,000	125,000	7,553	-	-	5,846	1,707	7,000	
35	112,000	112,000	957	-	-	741	216	5,000	
36	80,000	80,000	63,821	-	-	49,398	14,424	80,000	
37	75,000	75,000	-	-	-	-	-	-	
38	50,000	50,000	-	-	-	-	-	5,000	
39	50,000	50,000	-	-	-	-	-	30,000	
40	50,000	50,000	-	-	-	-	-	5,000	
41	20,000	20,000	-	-	-	-	-	-	
42	15,000	15,000	2,463	-	-	1,906	557	15,000	
<b>Total Non-DCC Eligible</b>	<b>\$ 4,127,000</b>	<b>\$ 6,983,000</b>	<b>\$ 565,445</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 437,654</b>	<b>\$ 127,791</b>	<b>\$ 804,861</b>	
<b>Total</b>	<b>\$ 4,127,000</b>	<b>\$ 8,157,000</b>	<b>\$ 647,320</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 502,626</b>	<b>\$ 144,695</b>	<b>\$ 914,861</b>	

District of Mission Amount (Net of Revenue): **\$ 144,694.53**

**Joint Water Major Projects Status**

<b>Key</b>	<b>Project</b>	<b>Description</b>	<b>2021 Budget</b>	<b>Study/Design/Construction Project Status (as of Dec 31, 2021)</b>	<b>Anticipated Completion</b>
1,3	Water Supply Expansion	Planning, design/permitting, and construction of new water source.	\$1,111,000	In planning phase	Current Phase – Q4 2022
5	Townline Wellfield Infrastructure Renewal	Re-drilling of Townline 1 and replacement of pump stations for both Townline 1 and 2.	\$1,745,000	Groundwater exploration for replacement Townline 1 well underway.	Q2 2023
17	Old Norrish Intake Decommissioning	Removal of old Norrish Intake weir, which is impeding proper operation of upstream 'new' intake.	\$937,000	Detailed design underway.	Q4 2023
21	Dickson Water Control Facility Remediation	Dam upgrades or replacement to meet dam safety hydrotechnical and seismic criteria	\$500,000	Planning phase.	Current phase – Q4 2022

**ABBOTSFORD / MISSION JAMES PLANT CAPITAL  
Statement of Financial Activities**

DCC Eligible - Flow	78.07%	21.93%
DCC Eligible - Load	85.76%	14.24%
Non-DCC Eligible	80.52%	19.48%

For the period ended December 31, 2021

Capital Expenditures Key	WSC		2021 YTD	Revenue		Expenses		2021 Projection	DCC Eligible	
	Approved Plan	Amended Plan		Abbotsford	Mission	Abbotsford	Mission			
<b>DCC Eligible - Flow</b>										
1	CF - JAMES Plant UV Disinfection Project (Add Disinfection Channel #2)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	47%
2	CF - Electrical, Allowance for SCADA and Electrical Upgrades	363,000	363,000	-	-	-	-	-	363,000	50%
3	CF - Odour, Odour (H2S) Audit	71,000	137,000	-	-	-	-	-	-	50%
4	Electrical, Add 500 kW Standby Generator #2	-	617,000	76,068	-	-	60,374	15,694	400,000	47%
5	Electrical, Allowance for SCADA and Electrical Upgrades (2020)	-	131,000	139,315	-	-	110,470	28,845	140,000	50%
<b>DCC Eligible - Load</b>										
6	CF - Biosolids Management Plan	-	315,000	69,336	-	-	57,646	11,690	92,000	50%
<b>Total DCC Eligible</b>		<b>\$ 434,000</b>	<b>\$ 1,563,000</b>	<b>\$ 284,719</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 228,490</b>	<b>\$ 56,229</b>	<b>\$ 995,000</b>	
<b>Non-DCC Eligible</b>										
7	CF - Biosolids Weigh Scale	\$ -	\$ 163,000	\$ 2,663	\$ -	\$ -	\$ 2,144	\$ 519	\$ 2,700	
8	CF - Building Condition Assessment	-	20,000	-	-	-	-	-	10,000	
9	CF - Effluent, Magmeter in Bypass Ports for the Effluent Weir	-	115,000	-	-	-	-	-	-	
10	CF - Effluent, Upgrade and Expand Reclaimed Water	-	190,000	-	-	-	-	-	20,000	
11	CF - General, Miscellaneous Repairs to Concrete Tanks and Channels	-	-	-	-	-	-	-	-	
12	CF - General, Asset Repl (Misc. - Primary Effluent Pumps, Laboratory & Misc, MCC)	-	130,000	106,634	-	-	85,862	20,772	110,400	
13	CF - General, Asset Replacement (TF #1 - Mechanical piping)	-	104,000	-	-	-	-	-	104,000	
14	CF - General, Clarifier #1 Process Mechanism	-	880,000	81,444	-	-	65,578	15,865	45,000	
15	CF - General, Miscellaneous Repairs to Concrete Tanks and Channels	528,000	-	-	-	-	-	-	-	
16	CF - General, Self-Cleaning System for Reclaimed Water System	-	106,000	-	-	-	-	-	-	
17	CF - JAMES WWTP Water Ingress Repair	-	386,000	-	-	-	-	-	-	
18	CF - Pickup, JointSW JS202 - 08 Honda RGELINE	-	26,000	26,191	-	-	21,089	5,102	26,191	
19	CF - Pickup, JointSW JS303 - 08 Ford F150	-	29,000	-	-	-	-	-	29,000	
20	CF - Primary, Add Watertight Isolation Gate to the Mid-Channel	-	508,000	514,610	-	-	414,364	100,246	442,000	
21	CF - Solids, Refurbish Pasteurization Tanks (2020)	-	600,000	-	-	-	-	-	-	
22	CF - Solids, Refurbish Pasteurization Tanks (2017)	-	420,000	9,215	-	-	7,420	1,795	10,000	
23	CF - Trickling Filter Media (Cell 3)	-	1,477,000	1,492,141	-	-	1,201,472	290,669	1,477,000	
24	Joint Sewer Contingency	500,000	500,000	-	-	-	-	-	-	
25	CF - Digester #3 - Gas System Misc	-	-	-	-	-	-	-	-	
26	CF - General, Asset Repl (Misc-Primary Eff Pump, Biofilter main duct, Clarif #1 misc)	170,000	378,000	-	-	-	-	-	-	
27	CF - General, Asset Replacement	-	381,000	-	-	-	-	-	381,000	
28	CF - General, Asset Replacement (Grit Tanks# 1&2 - misc)	-	168,000	-	-	-	-	-	-	
29	CF - General, Asset Replacement (Sed Tank #4-7 - misc)	-	280,000	-	-	-	-	-	-	
30	CF - General, Remove Sludge from West Lagoon	-	1,800,000	-	-	-	-	-	10,000	
31	CF - Matsqui Dyke Sinkhole - Full Repair	-	1,150,000	71,011	57,178	13,833	57,178	13,833	75,000	
32	CF - Pickup, JointSW JS304 - 10 Ford Ranger	-	25,000	22,579	-	-	18,181	4,398	22,579	
33	CF - Pickup, JointSW JS305 - 10 Ford F150	-	24,000	-	-	-	-	-	24,000	
34	Wastewater Sampler Replacement - Five Years	25,000	25,000	25,525	-	-	20,553	4,972	25,525	
35	JAMES Plant Biogas Upgrader	6,370,000	6,370,000	-	-	-	-	-	-	
36	JAMES Plant Digester Room Air Handling Unit	-	105,000	691	-	-	556	135	105,000	
37	CF - General, Replace Building Roofs (2020)	-	73,000	5,100	-	-	4,107	993	73,000	
38	CF - Condition Assessment for JAMES Plant Assets (2020)	-	200,000	-	-	-	-	-	50,000	
39	General, Miscellaneous Repairs to Concrete Tanks and Channels - 2021	-	2,112,000	150,198	-	-	120,940	29,259	135,000	
40	JAMES Plant UV Disinfection Project (Add UV Disinfection to Channel #2)	-	-	37,483	30,181	7,302	30,181	7,302	190,000	
41	JAMES Plant UV Bulb Replacement	-	140,000	73,285	-	-	59,009	14,276	-	
<b>Total Non-DCC Eligible</b>		<b>\$ 7,593,000</b>	<b>\$ 18,885,000</b>	<b>\$ 2,618,770</b>	<b>\$ 87,359</b>	<b>\$ 21,135</b>	<b>\$ 2,108,634</b>	<b>\$ 510,136</b>	<b>\$ 3,367,395</b>	
<b>Total</b>		<b>\$ 8,027,000</b>	<b>\$ 20,448,000</b>	<b>\$ 2,903,489</b>	<b>\$ 87,359</b>	<b>\$ 21,135</b>	<b>\$ 2,337,124</b>	<b>\$ 566,366</b>	<b>\$ 4,362,395</b>	

District of Mission Amount (Net of Revenue): **\$ 545,230.99**

**JAMES Plant Major Projects Status**

<b>Key</b>	<b>Project</b>	<b>Description</b>	<b>2021 Budget</b>	<b>Study/Design/ Construction Project Status (as of Dec 31, 2021)</b>	<b>Anticipated Completion Date</b>
6	Biosolids Management Plan	Study to further review technologies for solids treatment, handling, and management issues, and pending changes in OMRR and impact to end use plan	\$315K	Study – 10%	Quarter 2 2022
1,9,10, 16	JAMES Plant UV Disinfection Project	Design and install a Ultra-Violet (UV) System to replace the current chlorine gas and sodium dioxide gas system for disinfection	\$411K	Design – 100% Construction – 100%	Completed
12, 20	Replacement of gates (Mid-channel, primary sedimentation tanks, grit tanks)	To assess the gates condition and replace as required	\$638K	Inspection – 100% Design – 100% Construction – 99%	Substantially complete
13,23	Trickling Filter #1 Media Replacement (Cell 3)	Replace media in Cell 3 of Trickling Filter (TF) #1; inspect TF and repair as required	\$1.581M	Design – 100% Construction – 100%	Completed
14	General, Clarifier #1 Process Mechanism	Inspect and repair/replace mechanism in Secondary Clarifier #1	\$880K	Inspection – 100% Design – 100% Construction – 0%	Quarter 2 2022
21,22	Solids, Refurbish Pasteurization Tanks	Clean, inspect and repair (if necessary) the pasteurization system	\$1.02M	Design (Pipe Changes) – 100% Construction – 100%  Cleaning – 100% Inspection – 100%	Project to put on hold until after the Biosolids Management Plan (Key #8) is complete (Report JSSC 009-2021)
4	Electrical, Add 500 kW Standby Generator #2	Add a second 500 kW standby Generator #2 at the JAMES Plant, and a new generator diesel fuel storage tank.	\$617K	Design – 30%	Quarter 4 2022
31	Matsqui Dyke Sinkhole – Full Repair	Further investigate the cause of the sinkhole; engineering design and construction to perform a full repair to the dyke.	\$1.15M	Design – 0%	Quarter 1 2023

**Appendix F**

Key	Project	Description	2021 Budget	Study/Design/ Construction Project Status (as of Dec 31, 2021)	Anticipated Completion Date
39	General, Miscellaneous Repairs to Concrete Tanks and Channels	Inspect, design and repair miscellaneous concrete tanks and channels as required	\$2.112M	Design – 100%	Quarter 2 2022

**Appendix F**

# REPORT

---

To: Abbotsford Mission Water & Sewer Commission (WSC)

From: Tim McBride, Acting Senior Manager, Procurement  
Komal Basatia, General Manager, Finance & Procurement Services

Date: April 29, 2022

Subject: Amendments to Officer Designation & Delegation of Authority Bylaw for the City of Abbotsford

File: 0550-02

Report No.: JSSC 24-2022

Appendices: None

---

## **WATER & SEWER COMMISSION (WSC) RECOMMENDATION**

THAT Report No. JSSC 24-2022, dated April 29, 2022 from the Acting Senior Manager of Procurement (Abbotsford), regarding Bylaw No. 3257-2022, "Officer Designation and Delegation of Authority Amendment Bylaw (No. 2), 2022", be received for information.

## **PURPOSE**

The adoption of amendments to the *Officer Designation and Delegation of Authority Bylaw, 2018*. These changes are to provide for greater transparency, efficient administration and better business practices.

## **BACKGROUND**

For the City of Abbotsford, the *Officer Designation and Delegation of Authority Bylaw, 2018*, was adopted in early 2018, and codified and consolidated previously delegated authorities, in various Bylaws, into a single bylaw and established authority for transactional limits. It defined a role-based accountability framework for certain operational and administrative functions, as well as streamlined procedures for approving and executing contracts and commitments on behalf of the City, based on those transactional limits.

## **DISCUSSION / ANALYSIS**

Under the Abbotsford Mission Water Sewer Commission agreement, the City of Abbotsford is the operator of the Joint Water Sewer Utility system. Any updates to City of Abbotsford's *Officer Designation and Delegation of Authority Bylaw* also apply to the Abbotsford Mission Water Sewer Commission.

---

The City of Abbotsford has recently updated the delegation authority limits for contracts and commitments. The proposed amendments further balance the need for both Council oversight and corporate control with operational efficiency.

As with the original *Officer Designation and Delegation of Authority Bylaw, 2018*, the proposed amendments do not displace Council’s authority to reconsider decisions of a delegated authority in accordance with City bylaws and Section 156 of the *Community Charter*.

Through these amendments, City Manager’s (Abbotsford) delegated approval authority limit is changed from \$350,000 to \$1 million dollars. This change is not only in-line with current best practices but also brings the City’s approval authority limit similar to many other BC municipalities.

## FINANCIAL IMPLICATIONS

The proposed amendments are intended to further strengthen City of Abbotsford Council’s ability to engage in effective policy creation and strategic governance, and to increase operational efficiency.

Under the Abbotsford Mission Water Sewer Commission agreement, the Joint Five Year Financial Plan outlines and provides authority for planned expenditures and revenue sources to meet financial objectives of the joint system. Adoption of the proposed amendments will support the Commission’s financial transparency by enhancing the accountability framework within which various operational transactions and expenditures are made. All expenditures carried out under the delegation bylaw will be consistent with the Commission approved financial plan.

## SUMMARY

The proposed amendments clarify and enhance a role-based accountability framework that assigns responsibility for certain operational and administrative functions to specified staff. They streamline procedures for approving the form and executing contracts, commitments on behalf of the City based on transaction value and provide for effective and efficient operations of staff in accordance with the Bylaw.

**APPROVED**



By tmcbride at 4:10 pm, May 02, 2022

---

Tim McBride, SCMP  
Acting Senior Manager, Procurement  
Finance & Procurement Services

**APPROVED**



By kbasatia at 8:30 am, May 03, 2022

---

Komal Basatia, CPA, CGA  
General Manager, Finance & Procurement  
Services

**APPROVED**



By risaac at 10:02 am, May 03, 2022

---

Rob Isaac, P.L. Eng.  
General Manager, Engineering & Regional  
Utilities