

# Tri-County Water Board of Management Agenda

July 26, 2022, 7:00 p.m.

Electronic Participation Meeting via Zoom

This meeting will be held electronically. Please contact the Clerk's Department if you require an alternate format or accessible communication support or wish to receive the link to the meeting, at 519-785-0560 or by email at [clerk@westelgin.net](mailto:clerk@westelgin.net).

Pages

1. **Call to Order**

2. **Adoption of Agenda**

Recommendation:

That Tri-County Water Board hereby adopts the Agenda for July 26, 2022 as presented.

3. **Disclosure of Pecuniary Interest**

4. **Minutes**

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Recommendation:

That minutes of the Tri-County Water Board meeting on April 26, 2022 be adopted as circulated and printed.

5. **Business Arising from Minutes**

6. **Financials**

6.1. **2021 Audited Financial Statements**

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Recommendation:

That the Tri-County Water Board hereby receives and approves the 2021 Audited Financial Statements and Letter of Independence.

**6.2. Financials as of June 30, 2022**

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Recommendation:

That the Tri-County Water Board hereby receives the Financials as of June 30, 2022 as presented.

**7. Staff Reports**

**7.1. S. Smith, OCWA - Tri-County Drinking Water System Operations Report - Q2 2022**

21

Recommendation:

That the Tri-County Water Board hereby receives the Tri-County Drinking Water System Operations Report for the Second Quarter of 2022.

**7.2. 2023 Budget**

34

Recommendation:

That the Tri-County Water Board here by approve the 2023 Budget, as presented; and

That the Tri-County Water Board set the water rate for the Tri-County Drinking Water Primary System as \$1.17 as of July 1, 2023.

**8. Adjournment**

Recommendation:

That the Tri-County Water Board hereby adjour at \_\_\_\_ to reconvene on October 18, 2022 at 7:00 p.m. or at the Call of the Chair.

# **Tri-County Water Board of Management**

## **Minutes**

**Date: April 26, 2022, 7:00 p.m.**

**Location: West Elgin Community Complex - Hybrid Meeting**

**160 Main Street**

**West Lorne**

**Electronic Hybrid Meeting**

**Present:** Allan Mayhew, Southwest Middlesex  
Angela Cammaert, West Elgin  
Bonnie Rowe, West Elgin  
Doug Bartlett, Southwest Middlesex  
Duncan McPhail, West Elgin  
Ken Loveland, Dutton Dunwich  
Marigay Wilkins, Southwest Middlesex  
Taraesa Tellier, West Elgin  
Tim Sunderland, Chatham-Kent  
Michael Noe, Newbury  
Mike Hentz, Dutton Dunwich  
Amarilis Drouillard, Dutton Dunwich

**Regrets:** Diane Brewer, Newbury

**Staff Present:** Jana Nethercott, Recording Secretary  
Magda Badura, CAO/Treasurer

**Regrets:** Jill Bellchamber-Glazier, SWM

**Also Present:** Sam Smith, OCWA  
Dale LeBretton, OCWA  
Vitaly, OCWA  
Robin Trepanier, OCWA  
Meagan Garber, OCWA  
Mark Harris, OCWA

**This meeting was held virtually.**

**1. Call to Order**

Chair Duncan McPhail called the meeting to order at 7:00 p.m.

**2. Adoption of Agenda**

**Moved:** Allan Mayhew

**Seconded:** Angela Cammaert

That Tri-County Water Board hereby adopts the Agenda for April 26, 2022 as presented.

For (11): Allan Mayhew, Angela Cammaert, Bonnie Rowe, Doug Bartlett, Duncan McPhail, Ken Loveland, Marigay Wilkins, Taraesa Tellier, Michael Noe, Mike Hentz, and Amarilis Drouillard, Dutton Dunwich

Absent (2): Tim Sunderland, and Diane Brewer

Voter Type: Majority (Voted), Recorded

**Disposition: Carried (11 to 0)**

**3. Disclosure of Pecuniary Interest**

No disclosures

**4. Minutes**

**Moved:** Bonnie Rowe

**Seconded:** Doug Bartlett

That minutes of the Tri-County Water Board meeting on January 25, 2022 be adopted as circulated and printed.

For (11): Allan Mayhew, Angela Cammaert, Bonnie Rowe, Doug Bartlett, Duncan McPhail, Ken Loveland, Marigay Wilkins, Taraesa Tellier, Michael Noe, Mike Hentz, and Amarilis Drouillard, Dutton Dunwich

Absent (2): Tim Sunderland, and Diane Brewer

Voter Type: Majority (Voted), Recorded

**Disposition: Carried (11 to 0)**

**5. Business Arising from Minutes**

**5.1 Verbal Update on Cyber Insurance Coverage**

Magda Badura, Administrator reported that she is awaiting some information to clarify details on what is covered. She is awaiting a full report and it will come in a Closed Session at the next meeting.

## **5.2 Communication Protocol - Phone Tree**

Jana Nethercott, Recording Secretary presented the updated phone tree for an emergency.

## **6. Financials**

Magda Badura, Administrator reported on the first quarter financials. Revenues are slightly under budget. List provided of Capital work orders since January.

**Moved:** Ken Loveland

**Seconded:** Marigay Wilkins

The the Tri-County Water Board hereby receives the financials as of March 31, 2022 as presented.

For (12): Allan Mayhew, Angela Cammaert, Bonnie Rowe, Doug Bartlett, Duncan McPhail, Ken Loveland, Marigay Wilkins, Taraesa Tellier, Tim Sunderland, Michael Noe, Mike Hentz, and Amarilis Drouillard, Dutton Dunwich

Absent (1): Diane Brewer

Voter Type: Majority (Voted), Recorded

**Disposition: Carried (12 to 0)**

## **7. Staff Reports**

### **7.1 Annual Summary Report - Schedule 22**

Meagan Garber presented the 2021 Summary Report.

**Moved:** Taraesa Tellier

**Seconded:** Tim Sunderland

That the Tri-County Water Board hereby receives the 2021 Summary Report (Section 22 of O'Reg 170/03 for the Tri-County Primary Drinking Water System.

For (12): Allan Mayhew, Angela Cammaert, Bonnie Rowe, Doug Bartlett, Duncan McPhail, Ken Loveland, Marigay Wilkins, Taraesa Tellier, Tim Sunderland, Michael Noe, Mike Hentz, and Amarilis Drouillard, Dutton Dunwich

Absent (1): Diane Brewer

Voter Type: Majority (Voted), Recorded

**Disposition: Carried (12 to 0)**

## **7.2 Section 11 Annual Drinking Water Report**

**Moved:** Michael Noe

**Seconded:** Mike Hentz

That the Tri-County Water Board hereby receives the 2021 Annual Summary Report for the Tri-County Drinking Water Primary System as required by Section 11 of O'Reg 170/30

For (12): Allan Mayhew, Angela Cammaert, Bonnie Rowe, Doug Bartlett, Duncan McPhail, Ken Loveland, Marigay Wilkins, Taraesa Tellier, Tim Sunderland, Michael Noe, Mike Hentz, and Amarilis Drouillard, Dutton Dunwich

Absent (1): Diane Brewer

Voter Type: Majority (Voted), Recorded

**Disposition: Carried (12 to 0)**

## **7.3 MECP Final Inspection Report - 2022**

Meagan Garber presented the Inspection Report.

**Moved:** Amarilis Drouillard, Dutton Dunwich

**Seconded:** Allan Mayhew

That the Tri-County Water Board hereby receives the MECP 2021 Final Inspection Report for the Tri-County Drinking Water Primary System.

For (12): Allan Mayhew, Angela Cammaert, Bonnie Rowe, Doug Bartlett, Duncan McPhail, Ken Loveland, Marigay Wilkins, Taraesa Tellier, Tim Sunderland, Michael Noe, Mike Hentz, and Amarilis Drouillard, Dutton Dunwich

Absent (1): Diane Brewer

Voter Type: Majority (Voted), Recorded

**Disposition: Carried (12 to 0)**

#### **7.4 OCWA- Additional Cost Proposal**

Dale LeBritton provided an update that this letter was sent outlining additional costs with some new duties, such as looking after the meter chambers that were added as part of the update to the Master Agreement and an additional phone bill that previously OCWA had been paying for the last 1.5 years. The bulk of the additional costs is for maintain the meters in the enclosed spaces and calibrations required.

The additional sampling should have been caught and charged earlier as the regulations were updated almost three years ago. In a fixed cost contract, there was often room to absorb this cost, however with the rising costs the last year and a half, this can no longer be absorbed. In 2021 OCWA was over budget on communications and chemicals.

**Moved:** Bonnie Rowe

**Seconded:** Doug Bartlett

That the Tri-County Water Board hereby approve the additional annual cost to the agreement with Ontario Clean Water Agency of \$7,047.19, retroactive to January 1, 2022.

For (11): Allan Mayhew, Bonnie Rowe, Doug Bartlett, Duncan McPhail, Ken Loveland, Marigay Wilkins, Taraesa Tellier, Tim Sunderland, Michael Noe, Mike Hentz, and Amarilis Drouillard, Dutton Dunwich

Against (1): Angela Cammaert

Absent (1): Diane Brewer

Voter Type: Majority (Voted), Recorded

**Disposition: Carried (11 to 1)**

#### **7.5 SCADA Assessment Report**

Mark Harris provided an overview of the SCADA Assessment. An implementation program has been proposed, however in late 2022 the Historian has been failing and it is proposed that this be moved forward from year 2 to happen immediately. OCWA has obtained quotes and a report will be coming forward with these quotes.

**Moved:** Angela Cammaert

**Seconded:** Ken Loveland

That the Tri-County Water Board hereby receives the SCADA Assessment Report from Mark Harris, OCWA

For (12): Allan Mayhew, Angela Cammaert, Bonnie Rowe, Doug Bartlett, Duncan McPhail, Ken Loveland, Marigay Wilkins, Taraesa Tellier, Tim Sunderland, Michael Noe, Mike Hentz, and Amarilis Drouillard, Dutton Dunwich

Absent (1): Diane Brewer

Voter Type: Majority (Voted), Recorded

**Disposition: Carried (12 to 0)**

## **7.6 Estimate of Potential Water Users**

Jana Nethercott, Recording Secretary presented the Estimate of potential Water Users form, seeing direction on using this form as it is listed in the Master Agreement. Staff are to have this form distributed no later than July 1 of each year and they are to be returned to the Secretary no later than September 1.

**Moved:** Allan Mayhew

**Seconded:** Taraesa Tellier

That Tri-County Water Board hereby receives the report from Jana Nethercott, re: Estimate of Potential Water Users; and

That the Tri-County Water Board hereby directs staff to move forward with using the Estimate of Potential Water Users Form as per Section 13 of the Master Tri-County Water Board Agreement.

For (12): Allan Mayhew, Angela Cammaert, Bonnie Rowe, Doug Bartlett, Duncan McPhail, Ken Loveland, Marigay Wilkins, Taraesa Tellier, Tim Sunderland, Michael Noe, Mike Hentz, and Amarilis Drouillard, Dutton Dunwich

Absent (1): Diane Brewer

Voter Type: Majority (Voted), Recorded

**Disposition: Carried (12 to 0)**

## **7.7 OCWA- Q1 Operations Report**



Meagan Garber provided an overview of the Q1 Operations report. Sam Smith provided an overview of the maintenance work that has been done at the plant in Q1, there were a number of alarms related to the Historian and SCADA upgrades that are needed. Vitaly reported on the Capital work. Some projects from 2021 were delayed due to supply chain issues and COVID. The valves in Eagle East Chamber replacement and Pumps at the low lift have been completed, all projects from 2021 Capital will be completed by end of May or June. The capital work for 2022 has started and at this point there are no supply chain issues so far.

Tim Sunderland stated that Bothwell has noticed a great trend in lower THMs which he believes this is a result of the PH project, which is good news.

**Moved:** Tim Sunderland

**Seconded:** Michael Noe

That the Tri-County Water Board hereby receives the First Quarter Operations Report for the Tri-County Drinking Water Primary System.

For (12): Allan Mayhew, Angela Cammaert, Bonnie Rowe, Doug Bartlett, Duncan McPhail, Ken Loveland, Marigay Wilkins, Taraesa Tellier, Tim Sunderland, Michael Noe, Mike Hentz, and Amarilis Drouillard, Dutton Dunwich

Absent (1): Diane Brewer

Voter Type: Majority (Voted), Recorded

**Disposition: Carried (12 to 0)**

## **8. New Business**

### **8.1 Verbal Update on Coloured Water Study - OCWA**

Dale LeBritton reported that the project has started and sampling is underway and it will take some time to work thru the sampling schedule so that samples can be taken at different times of the year, different water qualities in the lake to ensure a wholesome set of samples and it will be late summer or early fall before this is completed and a report can be brought forward.

### **8.2 2023 Budget Cycle - Magda Badura**

Magda Badura, Administrator reported that she would like to present the 2023 Operating and Capital Budget at the July meeting, due to the complicated nature and the fact that a few options need to be presented to manage significant expenses required in the near future. Staff direction was provided to prepare the Capital and Operating Budget for the next meeting.

**9. Adjournment**

**Moved:** Taraesa Tellier

**Seconded:** Michael Noe

That the Tri-County Water Board hereby adjourn at 8:02 p.m. to reconvene on July 26, 2022 at 7:00 p.m. or at the Call of the Chair.

For (12): Allan Mayhew, Angela Cammaert, Bonnie Rowe, Doug Bartlett, Duncan McPhail, Ken Loveland, Marigay Wilkins, Taraesa Tellier, Tim Sunderland, Michael Noe, Mike Hentz, and Amarilis Drouillard, Dutton Dunwich

Absent (1): Diane Brewer

Voter Type: Majority (Voted), Recorded

**Disposition: Carried (12 to 0)**

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Duncan McPhail, Chair

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Jana Nethercott, Recording  
Secretary

**TRI-COUNTY WATER BOARD**  
**FINANCIAL STATEMENTS**  
**FOR THE YEAR ENDED DECEMBER 31, 2021**

**TRI-COUNTY WATER BOARD  
FINANCIAL STATEMENTS  
FOR THE YEAR ENDED DECEMBER 31, 2021**

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<b>-1-</b>	Independent Auditor's Report
<b>-3-</b>	Statement of Financial Position
<b>-4-</b>	Statement of Operations and Accumulated Surplus
<b>-5-</b>	Statement of Cash Flows
<b>-6-</b>	Statement of Change in Net Financial Assets
<b>-7-</b>	Notes to the Financial Statements
<b>-9-</b>	Schedule 1 - Schedule of Tangible Capital Assets

## **INDEPENDENT AUDITOR'S REPORT**

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### **To the Members of Board, Ratepayers and Inhabitants of the Tri-County Water Board**

#### **Opinion**

We have audited the accompanying financial statements of Tri-County Water Board (the "Board"), which comprise the Statement of Financial Position as at December 31, 2021, and Statements of Operations and Accumulated Surplus, Cash Flows and Change in Net Financial Assets for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of Tri-County Water Board as at December 31, 2021 and its financial performance and its changes in cash flows and net financial assets for the year then ended in accordance with Canadian public sector accounting standards.

#### **Basis of Opinion**

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Board in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### **Responsibilities of Management and Those Charged with Governance for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Board's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless management either intends to liquidate the Board or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Board's financial reporting process.

## **Auditor's Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Board's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Board's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Board to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

**July 26, 2022**  
**London, Canada**

**LICENSED PUBLIC ACCOUNTANT**

**TRI-COUNTY WATER BOARD**  
**STATEMENT OF FINANCIAL POSITION**  
**AS AT DECEMBER 31, 2021**

	2021	2020
<b>FINANCIAL ASSETS</b>		
Due from Municipality of West Elgin - operating (note 3)	\$ 970,425	\$ 818,832
<b>NET FINANCIAL ASSETS</b>	<b>970,425</b>	<b>818,832</b>
<b>NON-FINANCIAL ASSETS</b>		
Tangible capital assets - Schedule 1 (note 2.c)	11,040,044	11,633,903
Capital work in progress	40,876	-
	<b>11,080,920</b>	<b>11,633,903</b>
<b>ACCUMULATED SURPLUS (NOTE 4)</b>	<b>\$ 12,051,345</b>	<b>\$ 12,452,735</b>

The accompanying notes are an integral part of the financial statements

**TRI-COUNTY WATER BOARD**  
**STATEMENT OF OPERATIONS AND ACCUMULATED SURPLUS**  
**FOR THE YEAR ENDED DECEMBER 31, 2021**

	<b>Budget 2021</b>	<b>Actual 2021</b>	<b>Actual 2020</b>
<b>REVENUES</b>			
Current interest	\$ 17,000	\$ 3,017	\$ 10,656
Water billings	1,342,617	1,346,055	1,284,675
Other revenue	-	-	17,950
	<b>1,359,617</b>	<b>1,349,072</b>	<b>1,313,281</b>
<b>EXPENDITURES</b>			
Amortization	-	717,686	783,545
Minor capital expenditures	638,326	185,031	160,853
OCWA contract and callouts	440,667	440,667	434,155
Operating and maintenance	414,101	407,078	401,864
	<b>1,493,094</b>	<b>1,750,462</b>	<b>1,780,417</b>
<b>EXCESS OF REVENUE OVER EXPENDITURES (EXPENDITURES OVER REVENUE)</b>	<b>(133,477)</b>	<b>(401,390)</b>	<b>(467,136)</b>
<b>ACCUMULATED SURPLUS, BEGINNING OF YEAR</b>	<b>12,452,735</b>	<b>12,452,735</b>	<b>12,919,871</b>
<b>ACCUMULATED SURPLUS, END OF YEAR</b>	<b>\$ 12,319,258</b>	<b>\$ 12,051,345</b>	<b>\$ 12,452,735</b>

The accompanying notes are an integral part of the financial statements



**TRI-COUNTY WATER BOARD  
STATEMENT OF CASH FLOWS  
FOR THE YEAR ENDED DECEMBER 31, 2021**

	2021	2020
<b>NET INFLOW (OUTFLOW) OF CASH RELATED TO THE FOLLOWING ACTIVITIES:</b>		
<b>OPERATING ACTIVITIES</b>		
Excess of revenue over expenditures (expenditures over revenue) (page 4)	\$ (401,390)	\$ (467,136)
Non-cash charges to operations		
Amortization	717,686	783,545
Decrease (increase) in due from Municipality of West Elgin	(151,593)	(108,910)
	<b>164,703</b>	207,499
<b>INVESTING ACTIVITIES</b>		
Decrease (increase) in capital assets	(123,827)	(207,499)
Decrease (increase) in capital work in progress	(40,876)	-
	<b>(164,703)</b>	(207,499)
Cash provided by operating and investing transactions	-	-
Cash, beginning of year	-	-
<b>CASH, END OF YEAR</b>	<b>\$ -</b>	<b>\$ -</b>

The accompanying notes are an integral part of the financial statements

**TRI-COUNTY WATER BOARD**  
**STATEMENT OF CHANGE IN NET FINANCIAL ASSETS**  
**FOR THE YEAR ENDED DECEMBER 31, 2021**

	2021	2020
Excess of revenue over expenditures (expenditures over revenue) (page 4)	\$ (401,390)	\$ (467,136)
Amortization of tangible capital assets	717,686	783,545
Acquisition of tangible capital assets	(123,827)	(207,499)
Net change in work in progress	(40,876)	-
Increase in net financial assets	151,593	108,910
<b>NET FINANCIAL ASSETS, BEGINNING OF YEAR</b>	<b>818,832</b>	709,922
<b>NET FINANCIAL ASSETS, END OF YEAR</b>	<b>\$ 970,425</b>	\$ 818,832

The accompanying notes are an integral part of the financial statements

**TRI-COUNTY WATER BOARD**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**FOR THE YEAR ENDED DECEMBER 31, 2021**

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**1. Description of the Board**

The Tri-County Water Board (the Board) is a Joint Municipal Service Board in the Province of Ontario, Canada. It conducts its operations guided by the provisions of provincial statutes such as the Municipal Act, Municipal Affairs Act and related legislation. Subsequent to December 31, 2021, on January 21, 2022, the member municipalities signed a Master Agreement to govern the management of the System. This agreement replaced the agreement of July 22, 2014. The participating municipalities of the Board are the Municipalities of Dutton-Dunwich, Southwest Middlesex, Chatham-Kent, Newbury and West Elgin. The Municipality of West Elgin is the Administering Municipality. The System was previously operated under a Purchase Capacity Agreement and Management Agreement which were signed in 1991 between the same parties. The Municipalities of Chatham-Kent and Newbury are billed by Southwest Middlesex based on their usage.

**2. Significant accounting policies**

The financial statements of the Tri-County Water Board have been prepared by management in accordance with Canadian public sector accounting standards. The significant accounting policies are summarized as follows:

**a. Revenue recognition**

Revenue is recognized when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

Government grants and transfers are recognized in the financial statements as revenue in the period in which events giving rise to the transfer occur, providing the transfers are authorized, any eligibility criteria have been met, and reasonable estimates of the amounts can be made.

**b. Use of estimates**

The preparation of financial statements in conformity with Canadian public sector accounting standards requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenditures during the period. Actual results could differ from these estimates.

**c. Tangible capital assets**

Tangible capital assets are recorded at cost which includes all amounts that are directly attributable to acquisition, construction, development or betterment of the asset. The costs, less residual value, of the tangible capital assets are amortized on a straight-line basis over their estimated useful lives as follows:

Buildings	50 years
Infrastructure and equipment	25 years
Waterlines	75 years

**d. Budget**

The Board set a budget based on the accounting policies adopted previous to PSAB Handbook policy for tangible capital assets.

**TRI-COUNTY WATER BOARD  
NOTES TO THE FINANCIAL STATEMENTS  
FOR THE YEAR ENDED DECEMBER 31, 2021**

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**2. Significant accounting policies continued**

**e. Deferred revenue**

Revenue received for specific purposes which are externally restricted by legislation, regulation or agreement and are not available for general municipal purposes are accounted for as deferred revenue on the Statement of Financial Position. The revenue is recognized in the Statement of Operations and Accumulated Surplus in the year in which it is used for the specified purpose.

**3. Continuing operations**

All banking activities are administered by the Municipality of West Elgin, on behalf of the Board's activities. The amount due from the Municipality of West Elgin represents the net working capital position between the Municipality and the Board after adding or deducting payments made to or received from the Municipality of West Elgin.

**4. Accumulated Surplus**

Accumulated surplus consists of the following surplus balance:

	2021	2020
Reserve for future operations	\$ 1,191,365	\$ 1,039,772
Invested in tangible capital assets	10,859,980	11,412,963
	<b>\$ 12,051,345</b>	<b>\$ 12,452,735</b>

**5. Commitment**

The Board, through the Municipality of West Elgin, has contracted with OCWA to operate and maintain the System. The annual cost for 2021 was \$440,667 (2020 - \$434,155).

**6. Significant event**

In March 2020, the Province of Ontario declared a state of emergency due to the COVID-19 virus. It is unclear what impact, if any, the COVID-19 virus will have on the operations of the Board. The Board and management continue to monitor the situation.

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**TRI-COUNTY WATER BOARD**  
**SCHEDULE 1 - SCHEDULE OF TANGIBLE CAPITAL ASSETS**  
**FOR THE YEAR ENDED DECEMBER 31, 2021**

		Land	Buildings	Equipment	Waterlines	Total
<b>COST</b>						
Balance, beginning of year	\$	88,735	\$ 4,614,402	\$ 13,991,349	\$ 1,471,992	\$ 20,166,478
Add:						
Additions during the year		-	35,399	88,428	-	123,827
Less:						
Disposals during the year		-	-	-	-	-
<b>BALANCE, END OF YEAR</b>		<b>88,735</b>	<b>4,649,801</b>	<b>14,079,777</b>	<b>1,471,992</b>	<b>20,290,305</b>
<b>ACCUMULATED AMORTIZATION</b>						
Balance, beginning of year		-	1,527,307	6,210,391	794,877	8,532,575
Add:						
Amortization during the year		-	111,090	586,969	19,627	717,686
Less:						
Disposals during the year		-	-	-	-	-
<b>BALANCE, END OF YEAR</b>		<b>-</b>	<b>1,638,397</b>	<b>6,797,360</b>	<b>814,504</b>	<b>9,250,261</b>
<b>NET BOOK VALUE OF TANGIBLE CAPITAL ASSETS</b>		<b>88,735</b>	<b>\$ 3,011,404</b>	<b>\$ 7,282,417</b>	<b>\$ 657,488</b>	<b>\$ 11,040,044</b>

This schedule is provided for information purposes only

**Tri-County Water Board**  
Income Statement  
As of June 30 2022

	<u>2022 Actuals</u>	<u>2022 Budget</u>
<b>Revenues</b>		
02-7315-6110 BANK INTEREST	-	(10,000.00)
02-7315-6590 Water - Municipalities - <b>Note 1</b>	(579,025.93)	(1,361,142.45)
<b>Expenses</b>		
02-7315-7500 HYDRO	99,020.60	260,000.00
02-7315-7501 GAS	17,248.29	23,000.00
02-7315-7510 INSURANCE	21,536.28	21,540.60
02-7315-7511 TAXES	32,454.00	68,157.42
02-7315-7520 Grounds Maintenance - Phragmites Control	-	22,152.64
02-7315-7529 ADMINISTRATION EXPENSE	-	7,350.00
02-7315-7532 LICENSES & PERMITS	-	1,000.00
02-7315-7601 TELEPHONE & INTERNET	4,273.92	8,800.00
02-7315-7675 LEGAL	-	1,000.00
02-7315-7676 AUDIT	-	3,765.12
02-7315-7680 CONTRACTED SERVICES	223,638.48	447,277.00
02-7315-7681 Asset Management	-	14,247.64
02-7315-7901 TRANSFER FROM RESERVES	-	(135,536.97)
02-7315-8000 CAPITAL OVER \$10,0000	<u>7,721.96</u>	<u>628,389.00</u>
	<b>(173,132.40)</b>	-

**Notes:**

<b>Note 1 Water Revenue - Municipalities</b>	<b>Consumption</b>	<b>Consumption Budget</b>	<b>Variance</b>
West Elgin	210,846	206,608	2%
Southwest Middlesex	150,342	165,554	-9%
Newbury	23,113	20,325	14%
Chatham-Kent	37,935	34,980	8%
Dutton-Dunwich	<u>92,827</u>	<u>112,528</u>	<u>-18%</u>
	<b>515,063</b>	<b>539,995</b>	<b>-5%</b>



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

# Tri County Drinking Water System Operations Report Second Quarter 2022

Ontario Clean Water Agency, Southwest Region  
Sam Smith, Sr. Operations Manager  
Date: July, 20 2022

## **Facility Description**

Facility Name:	Tri-County Drinking Water System
Regional Manager:	Dale LeBritton (519) 476-5898
Sr. Operations Manager:	Sam Smith (226) 377-1540
Business Development Manager:	Robin Trepanier (519) 791-2922
Facility Type:	Municipal
Classification:	Class 2 Water Distribution, Class 2 Water Treatment
Title Holder:	Municipality

## **Service Information**

Area(s) Serviced:	West Elgin, Dutton/Dunwich, Southwest Middlesex, Newbury and Bothwell
Population Serviced:	9,985
No. of Connections:	
Water Meters:	Commercial / Residential
In Service Date:	2009

## **Capacity Information**

Total Design Capacity:	12.160 (1000 m <sup>3</sup> /day)
Total Annual Flow:	1,381 (1000 m <sup>3</sup> /year)
Average Day Flow:	3.770 (1000 m <sup>3</sup> /day)
Maximum Day Flow:	5.380 (1000 m <sup>3</sup> /day)

## **Operational Description**

Water treatment with intake in Lake Erie, 4 low lift pumps, lifting up to the treatment plant. Membrane filtration followed by injection with Sodium Hypochlorite for primary disinfection and into the 2 Storage Tanks. Pumping to tower & distribution system with 4 high lift pumps.



## **SECTION 1: COMPLIANCE SUMMARY**

### **FIRST QUARTER:**

There were no compliance issues to report during the first quarter.

### **SECOND QUARTER:**

There were no compliance issues to report during the second quarter.

## **SECTION 2: INSPECTIONS**

### **FIRST QUARTER:**

The report for the MECP inspection that was conducted on December 23rd, 2021 was received on March 22<sup>nd</sup>, 2022. The inspection had questions covering the following topics: Source, Capacity Assessment, Treatment Processes, Operations Manuals, Logbooks, Certification and Training, Water Quality Monitoring, Reporting & Corrective Actions, and Treatment Process Monitoring. The inspection rating has not yet been received however, there were no non-compliances with regulatory requirements identified during the inspection.

### **SECOND QUARTER:**

There was no Ministry of Environment, Conservation and Parks (MECP) or MOL inspections conducted during the second quarter.

The final inspection rating was received from the MECP on April 13<sup>th</sup>, 2022. The Tri-County DWS received a final inspection rating of 100%.

## **SECTION 3: QEEMS UPDATE**

### **FIRST QUARTER:**

In December 2020, the Ministry proposed administrative updates to the Director's Directions to reflect current practice in municipal residential drinking water systems and improvements in technology that have occurred since the directions were first published in 2007. Based on the Ministry's proposal and feedback received from the public, the Director's Directions were updated in May 2021. On March 3<sup>rd</sup>, 2022 the Tri-County Drinking Water System Schedule C (Subject System Description Form) was updated. Additionally, on March 16<sup>th</sup>, 2022 OP-05 Documents and Records Control and OP-05A Documents and Records Control Locations were updated to reflect the revisions made to the Director's Direction- Minimum Requirements for Operational plans.

The Essential/Emergency Service and Supply Contact List was updated by the QEEMS Representative on February 28<sup>th</sup>, 2022 as several changes were required prior to the annual review.

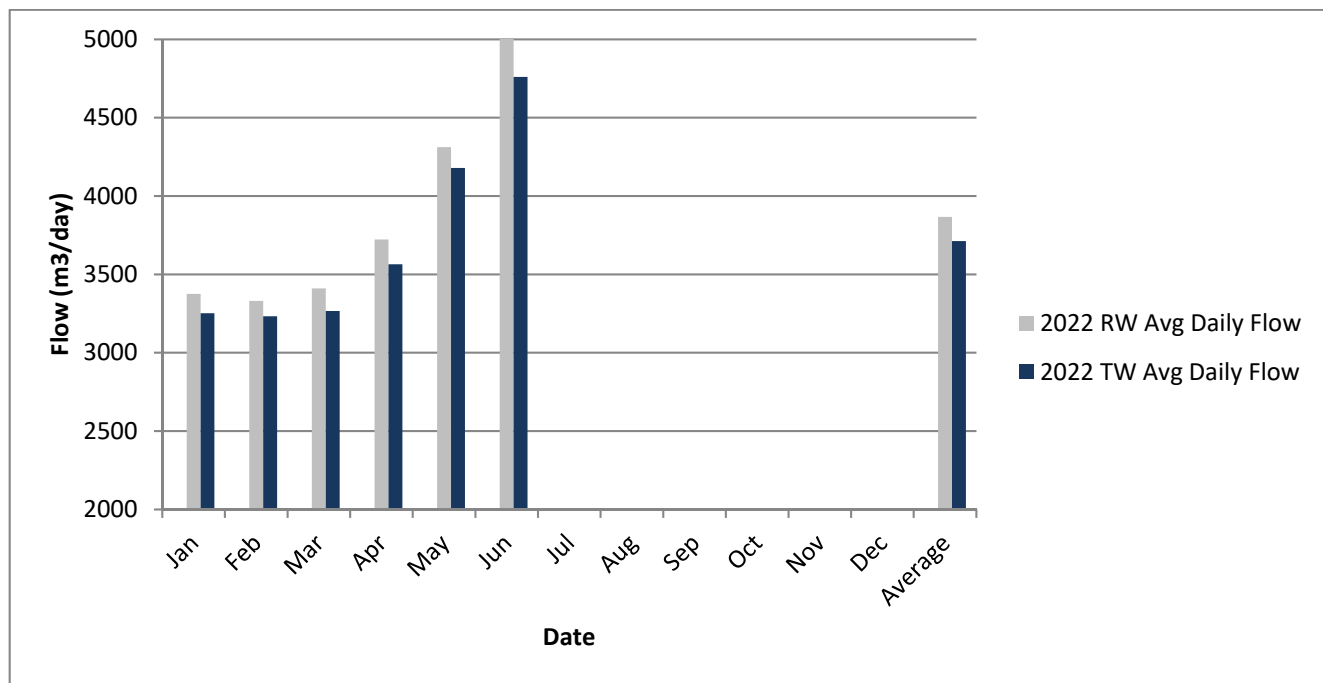
### **SECOND QUARTER:**

There were no QEEMS updates this quarter.

#### SECTION 4: PERFORMANCE ASSESSMENT REPORT

The Tri-County Drinking Water System is currently operating at 96.0% efficiency with the water taken from Lake Erie that is treated and sent to the distribution systems. Chart 1 below shows the raw water takings compared to the treated water distributed to the distribution system so far in 2022.

Chart 1: Average daily water takings compared to treated water distributed to the distribution system



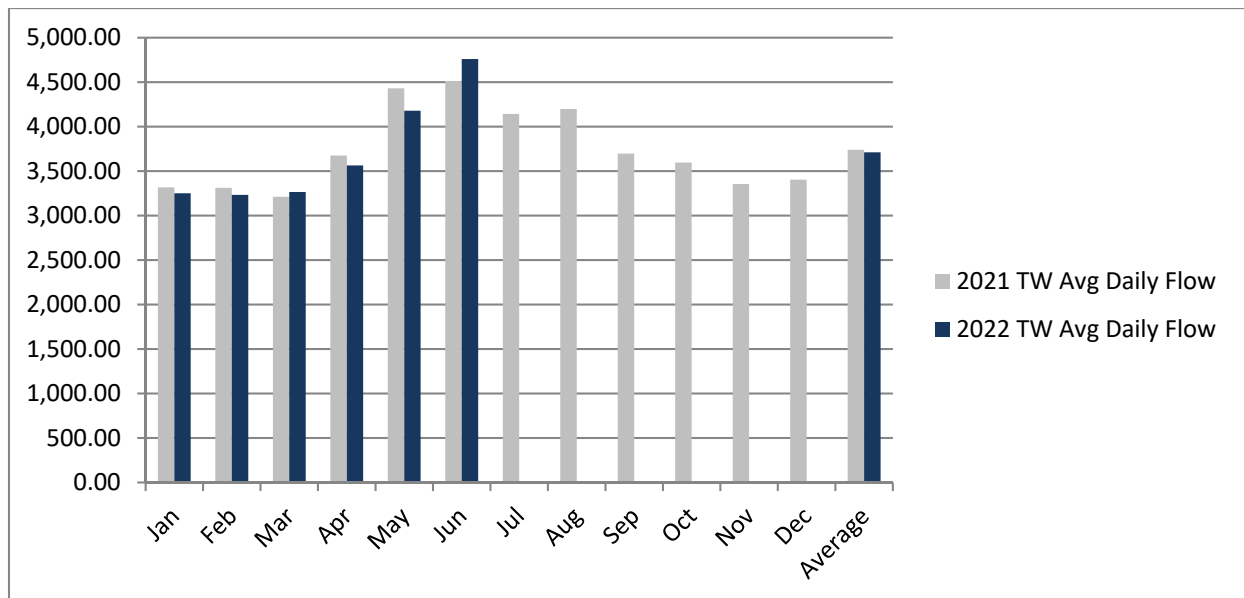
Raw water is sampled on a weekly basis and tested for E. coli and Total coliforms as per regulatory requirements. There are no limits identified in the regulations for E. coli and total coliform found in the raw water source. Table 1 below identifies the sample results for the first quarter.

Table 1: Raw water sample results 2022

	# Samples	E. Coli Range (cfu/100mL)	Total Coliform Range (cfu/100mL)
January	5	<10 – <100	10 – 500
February	4	<10 – <100	130 – 32000
March	4	<100 – <100	<100 – 300
April	4	<2 – <100	100 – 148
May	5	<2 – <100	<2 – 1300
June	4	<2 – <100	0 – <100

The raw water is treated through membrane filtration and chlorine disinfection. The treated water is distributed to the systems it serves through the high lift pumps. The average daily treated water sent to the distribution so far in 2022 was 3,712.1 m³/d. The average treated water flow in the second quarter of 2022 is down 0.94% when compared against the average daily flow in the second quarter of 2021. The Tri-County Drinking Water System is currently at 30.5% of its rated capacity. Chart 2 below depicts the treated water flow for 2022 compared to 2021 average daily flows.

Chart 2: Treated water average daily flow in 2022 compared to 2021



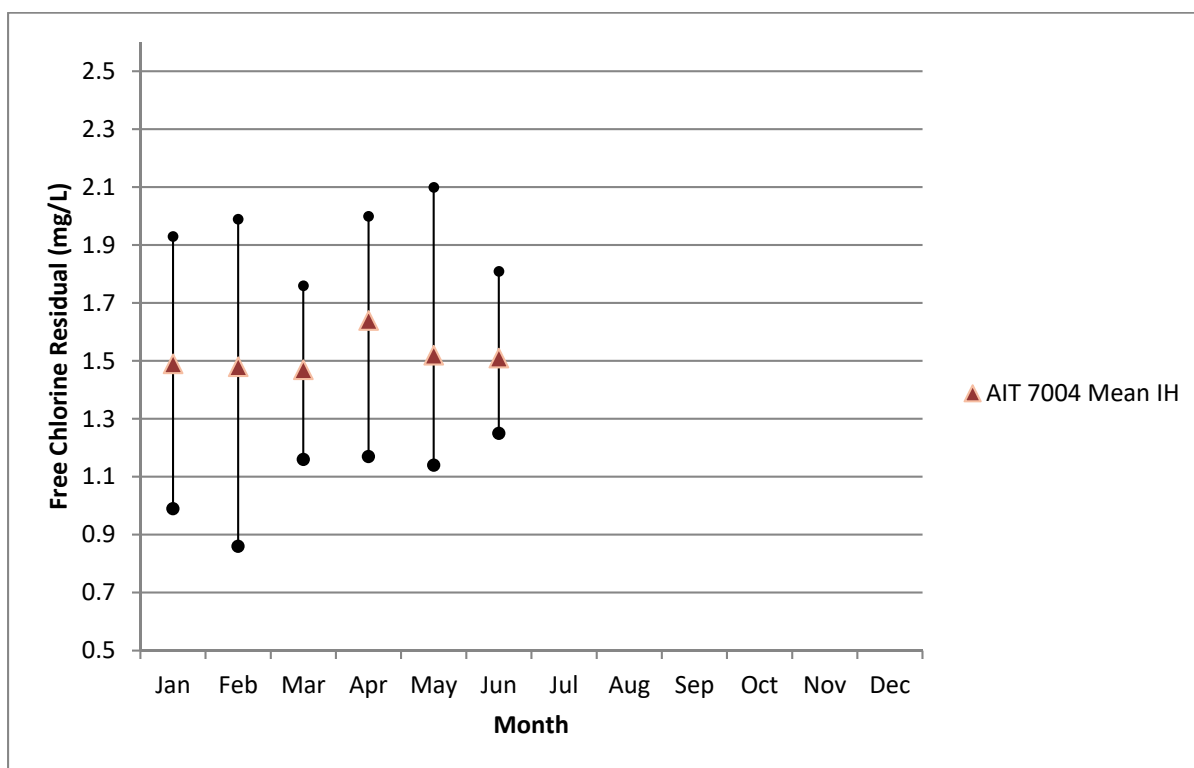
To ensure inactivation of viruses, bacteria and microorganisms the membrane filtration system is required to meet performance criteria for filtered water turbidity of less than or equal to 0.1 NTU in 99% of the measurements each month. The Tri-County Water Treatment Plant has met all regulatory requirements for inactivation so far in 2022. Table 2 below shows the performance of each filter rack and the overall filter rack performance.

Table 2: Filter Rack Performance in 2022

	Rack 1 % Readings <0.1ntu	Rack 2 % Readings <0.1ntu	Rack 3 % Readings <0.1ntu	Rack 4 % Readings <0.1ntu	Overall Filter Performance (% readings <0.1ntu)
January	100.00	100.00	100.00	100.00	100.00
February	100.00	100.00	100.00	99.90	99.98
March	100.00	100.00	100.00	99.80	99.95
April	100.00	100.00	100.00	100.00	100.00
May	100.00	100.00	100.00	99.90	99.98
June	100.00	100.00	100.00	99.90	99.98

Along with turbidity, chlorine residuals are monitored throughout the treatment process by continuous online free chlorine analyzers. Residuals are maintained in order to provide adequate primary disinfection to meet inactivation of viruses, bacteria and microorganisms. The chlorine also provides adequate residuals in the distribution systems the treatment plant serves (secondary disinfection). Chart 3 below provides the online minimum, maximum and average readings of free chlorine provided to the distribution systems. All results have met regulatory requirements.

Chart 3: Distribution System Free Chlorine Residuals



On a weekly basis the treated water is tested for *E. coli*, Total Coliforms and heterotrophic plate count (HPC). The limit for Total Coliform and *E. coli* is zero. There is no limit specified for heterotrophic plate count (HPC) as this is an operational guide to initiate an action plan if HPC results are continuously high. Table 3 below shows the number of samples taken each month along with the range of results. All samples have met regulatory requirements.

Table 3: Treated water sample results for 2022.

	# Samples	Total Coliform Range (cfu/100mL)	<i>E. coli</i> Range (cfu/100mL)	HPC (cfu/100mL)
January	5	0 - 0	0 - 0	<10 – <10
February	4	0 - 0	0 - 0	<10 – <10
March	5	0 - 0	0 - 0	<10 – <10
April	4	0 - 0	0 - 0	<10 – <10
May	5	0 - 0	0 - 0	<10 – <10
June	4	0 - 0	0 - 0	<10 – <10

The transmission main (distribution system) is sampled on a weekly basis at two locations for *E. coli*, Total Coliforms and heterotrophic plate count (HPC) to meet regulatory requirements. As with the treated water the limit for Total Coliform and *E. coli* is zero, heterotrophic plate count (HPC) doesn't have a limit. This is an operational guide to initiate an action plan if HPC results are continuously high. Table 4 below shows the number of samples taken each month along with the range of results.

Table 4: Distribution system sample results for 2022.

	# Samples	Total Coliform Range (cfu/100mL)	E. coli Range (cfu/100mL)	HPC (cfu/100mL)
January	10	0 - 0	0 - 0	<10 – <10
February	9*	0 - 0	0 - 0	<10 – <10
March	9*	0 - 0	0 - 0	<10 – <10
April	8	0 - 0	0 - 0	<10 – <10
May	10	0 - 0	0 - 0	<10 – <10
June	9**	0 - 0	0 - 0	<10 – <10

\*additional samples collected after replacement of valves in Eagle East chamber

\*\* additional sample collected after altitude valve repair

On a quarterly basis trihalomethanes are tested at two locations in the system. The first location is at the treatment plant prior to the water leaving the facility. The second location is at the end of the system, at the West Lorne Standpipe. Sampling from both locations provides information on how the THMs are forming in the system with retention time. There is an issue with elevated THMs in the distribution systems that the Tri-County Drinking Water System provides water to. Table 5 below provides the running average quarterly results; the running average limit for THMs is 100µg/L. All results are within regulatory requirements. However, THMs increase with increased retention time therefore THMs in the distribution system the WTP serves can be much higher, even reaching the regulatory limit.

Table 5: Trihalomethane sampling results.

	Limit (µg/L)	Treated Water THM Result (µg/L)	West Lorne Standpipe THM Result (µg/L)
July 2021		31	34
October 2021		62	90
January 2022		15	26
April 2022		21	32
Running Average	100	32.25	45.5

On a quarterly basis Haloacetic Acids (HAAs) are tested as per regulatory requirements. They are sampled at two locations in the system. The first location is at the treatment plant prior to the water leaving the facility. The second location is at the end of the system, at the West Lorne Standpipe. Sampling from both locations provides information on how the HAAs are forming in the system with retention time. Table 6 below provides the current running average quarterly results; the running average limit for HAAs is 80µg/L. All results are within regulatory requirements.

Table 6: Haloacetic Acid sampling results.

	Limit (µg/L)	Treated Water HAA Result (µg/L)	West Lorne Standpipe HAA Result (µg/L)
July 2021		15.6	15.6
October 2021		27.2	40.3
January 2022		5.9	15.3
April 2022		13.3	21.9
Running Average	80	15.5	23.2

## **SECTION 5: OCCUPATIONAL HEALTH & SAFETY**

### **FIRST QUARTER:**

There were no Health & Safety issues identified during the first quarter.

### **SECOND QUARTER:**

There were no Health & Safety issues identified during the second quarter.

## **SECTION 6: GENERAL MAINTENANCE**

### **FIRST QUARTER:**

#### **JANUARY**

- 04: Gerber onsite to fix small pressure relief valve drip leak connected to boiler system.
- 07: LAVO onsite to deliver sodium hypochlorite.
- 11: Farmington onsite to repair broken 1/4" copper line on pilot system.
- 11: Farmington on site to fix 1" double back flow preventer for the boiler system as it has a small leak.
- 12: Air Liquide delivered new CO2 tank.
- 18: Gerber onsite to install switch for tracer wires on both storage tanks.
- 19: Installed new UPS for Silver Clay chamber.
- 26: Air Liquide delivered CO2.

#### **FEBRUARY**

- 01: Air Liquide technician arrived to inspect CO2 system issue. He determined that the regulator within the Accu-Trol Manifold Control box has failed. Arranged for technicians to come and repair the issue tomorrow afternoon. Notified ORO. CO2 system is remaining offline.
- 02: Air Liquide onsite to replace CO2 regulator. Air Liquide bypassed the Accu-Trol Manifold Control box with a pressure regulator. Set line pressure to 40 psi. Tested and appears to work well. Will leave CO2 system offline tonight until tomorrow when we can run the CO2 system and monitor throughout the day. Discussed with ORO.
- 03: ASL Roteq on site to finish work on LLP 1040 and to remove LLP 1020
- 04: ASL Roteq onsite to continue removing LLP 1020
- 04: Eramosa onsite to pull data from PLC.
- 04: Dielco onsite to take measurements for low lift long line intake valve replacement.
- 09: Air Liquide on site to replace CO2 regulator. Sean from Air Liquide replaced the regulator with a larger one, but found it to still leak by very slowly during testing. He spoke with his boss and will be back this afternoon to install a two-step regulator system. Notified SOM.
- 09: Air Liquide delivered new CO2 tank.
- 10: Nevro onsite for Eagle East Chamber valve and flow meter replacement. Capital Projects manager held tailgate meeting.
- 11: SCG on site at Eagle East to wire flowmeter.
- 11: Eramosa onsite to set up temporary SCADA computer.
- 14: FloChem onsite to deliver 1 tote of captor 1 tote of NaOH. 1 tote citric acid
- 15: Sean from Air Liquid on site to work on Co2 system.
- 22: Ontario compressor onsite to perform annual maintenance on compressor A and B.
- 23: ASL Roteq onsite to return and install LLP-1040
- 24: ASL Roteq onsite to continue installation of serviced low lift pump LLP-1040.
- 25: Gerber on site to take measurements for new high lift VFD and new low lift VFD
- 25: Brian Kurtz Trucking onsite to deliver chemical. 1 tote of Citric Acid and 1 tote of Sodium Hydroxide.

## MARCH

02: Southwest Mechanical onsite to replace Co2 solenoid valve.  
02: Gerber on site to connect low lift pump LLP-1040 and wire up new CO2 system solenoid valve.  
03: Nevro onsite for Eagle East Chamber outlet valve replacement.  
03: ASL Roteq on site to finish work on LLP 1040 and to remove LLP 1020.  
04: ASL Roteq onsite to continue removing LLP 1020.  
04: Eramosa onsite to pull data from PLC.  
04: Dielco onsite to take measurements for low lift long line intake valve replacement.  
09: Air Liquide delivered new CO2 tank.  
11: Venture Automations onsite to change out Rack 3 1/4" air lines.  
15: Martins onsite to perform forklift inspection.  
16: Manitoulin onsite to deliver Cl gas.  
16: Air liquid onsite to deliver CO2.  
21: Flowmetrix onsite for annual flowmeter calibrations and storage tank milltronics calibrations.  
22: Flowmetrix onsite to calibrate flow meters and temperature gauge at LL and flow meters in transmission mains.  
24: Flowmetrix onsite to continue flow meter calibrations.  
30: Eramosa onsite to perform work on the temporary SCADA laptop as we are unable to access Excel.  
30: Air liquid onsite to deliver new CO2 tank.

## **SECOND QUARTER:**

### APRIL

01: Devine Flow Solutions (Cla-Val) onsite to replace o-rings in stems on both distribution PRVs.  
11: Gerber onsite for preliminary work for new high lift and low lift VFD installations.  
13: Gerber onsite to continue preliminary work for future high lift and low lift VFD installations.  
13: Hetek onsite to calibrate CO2 gas detector.  
14: Watech on site to replace light on top of standpipe.  
14: Air Liquide delivered new CO2 tank.  
20: Gerber at Marsh chamber working on electrical upgrades.  
22: Gerber onsite to perform preliminary work for VFD's  
25: Gerber onsite to change emergency exit signage at low lift building as well as carry on with preliminary work for future high lift VFDs.  
26: Paris from SCG on site to replace bleed block valves on racks and complete output pressure transmitter calibrations.  
26: Air Liquide delivered new CO2 tank.  
29: Earl Ross Inc. onsite installing new loading dock at chlorine gas building at the low lifts.  
29: Gerber onsite to continue with preliminary work for future high lift VFDs.

### MAY

02: Gerber onsite to continue with preliminary work for future high lift and low lift VFDs.  
05: Gerber onsite to replace batteries in PALL CP-3000 UPS.  
09: Air liquid delivered CO2 tank.  
13: Southwest Mechanical onsite to fix exhaust fan at Low Lift.  
13: Lavo onsite to deliver bulk Cl. See chemical receiving form for more details.  
13: NFTC onsite to inspect fibre optics between WTP and low lifts.  
18: Air liquid delivered CO2.  
18: Gerber onsite for preliminary work leading up the the high lift VFD installation next week.  
24: PALL onsite for annual health check.  
25: PALL onsite to continue annual health check.  
25: Eramosa onsite to assist Gerber with new VFD programming on high lift pump HLP-7030 and low lift pump LLP-1040.

- 25: Gerber onsite to wire up and install new VFDs on high lift pump HLP-7030, and low lift pump LLP-1040.
- 25: Rack 4 smart positioner on FCV-3483 LCD was not working. Replaced smart positioner and calibrated unit.
- 26: Ontario Compressor onsite for routine preventative maintenance
- 26: Eramosa onsite to program new VFD to be installed today on low lift pump LLP-1040.
- 26: Gerber onsite to install and wire new VFD to be installed today on low lift pump LLP-1040.
- 27: Ontario Compressor onsite to perform PM on compressor A and replace the filter o-ring in compressor B.
- 30: Gerber onsite working on preparations for next future VFDs to go on a high lift and low lift pump.
- 30: ASL Roteq onsite to fix packing on low lift pump LLP-1040, and inspect noise coming from low lift pump LLP-1030.
- 31: Gerber onsite working on preparations for next future VFDs to go on a high lift and low lift pump

## JUNE

- 01: Trojan onsite for annual UV servicing. They are to replace sleeves and bulbs in UV2, and perform an inspection/cleaning on UV1.
- 01: Gerber onsite for quarterly HVAC servicing.
- 01: Air Liquide delivered new CO2 tank.
- 01: Trojan Replaced bulbs in UV 2.
- 03: ASL Roteq onsite to perform vibration tests on low lift pump LLP-1030
- 06: Farmington onsite to replace check valve on 1" hydraulic check line on Wallacetown distribution.
- 09: Gerber onsite at the Marsh chamber working on electrical upgrades.
- 10: Southwest Mechanical onsite to replace broken exhaust fan in low lift chlorine building.
- 14: Gerber onsite to inspect faulted process drain pump PDP-9020.
- 14: Gerber onsite to wire up the new VFD on high lift pump HLP-7010.
- 14: Franklin Empire onsite to inspect process drain chamber milltronics unit.
- 15: Eramosa onsite to program new VFD on high lift pump HLP-7010.
- 15: Gerber onsite to finish wiring new VFD on high lift pump HLP-7010, and wire up new VFD on low lift pump LLP-1010.
- 15: Air Liquide delivered CO2.
- 21: Deilco onsite to change bolts on long line intake valve.
- 22: Dielco onsite to continue changing bolts on long line intake valve.
- 22: Gerber onsite at Marsh chamber to repair electrical cabinet door locking mechanism.
- 22: Gerber onsite to replace line reactor in the recently installed high lift pump HLP-7010 VFD.
- 23: Pratik from Eramosa worked with operator over the phone to troubleshoot the high lift pump HLP-7010 issue of switching to next pump after running for about 1 minute.
- 23: Air Liquide delivered CO2.
- 24: Gerber onsite to troubleshoot burning smell coming from new HLP-7010 VFD box.
- 24: Gerber onsite at low lift building to replace the warrantied low lift pump LLP-1030 VFD drive.
- 28: Bell onsite to troubleshoot phone line issue.
- 29: Farmington onsite for replacement of West Lorne Standpipe altitude valve.
- 30: Alberts generator onsite for yearly service of WTP generator and LL generator.
- 30: RMB onsite to fix issues we are having with phones.

## SECTION 7: ALARM SUMMARY

### FIRST QUARTER:

#### JANUARY

- 07: Received call from Spectrums that they had received a call from Ryan from Dutton Township about an eagle meter alarm arrived at plant and checked SCADA Every thing seemed to be running ok. Wallacetown tower at 9.31 m changed set point to start feeding water to Wallacetown arrived at eagle east chamber and opened the chamber up floor seemed fairly dry and could not see any thing causing problems monitored for 10 minutes



- 11: PIT 1028 (pressure transmitter for west train) was maxed out at 1033.88 kPa. Line ended up freezing causing a blockage in the line. Insulated the line afterwards.
- 15: Received call from spectrum for now normal alarm. Arrived at plant and observed no alarm from dialer screen. Below SCADA in alarm screen, possible Data Historian Failure alarm was observed. Reviewed trending, appears there is no loss of data. Verified dialer in electrical room is on, as "norm" and "net2" are both present on the dialer. Plant is currently making water, storage tanks are currently at 9.28m and 9.36m. West Lorne Standpipe currently at 35.23m, Wallacetown Tower currently at 9.37m. Completed plant walk through, all appears to be normal. Notified ORO.
- 23: Received alarm call from Spectrum for Possible Data Historian Fault. Tried to log onto remote SCADA, but could not connect, likely due to computer running slow. Computer was not frozen upon arrive, and the historian fault had cleared itself. Wallacetown dist. train was running during event, while West Lorne Standpipe dist. train and the low lifts were not running. Checked historian data and we lost data for 8min. Notified ORO. Will ask Eramosa to pull raw data from PLC on Monday.
- 31: Received call from Spectrums for communications fault 1 logged onto remote SCADA and seen the historian was in fault called on call tech at Eramosa. Technician from Eramosa called back and texted communicating that the historian has been reset. We requested to get the raw data sent for the time the historian was in fault.

## FEBRUARY

- 07: Received call from Spectrums for communications is off, historian faulted SCADA computer not responding and not opening any tabs. Called ORO and was instructed to restart the HMI. After computer rebooted it was running fine. We lost data for 11 minutes, will contact Eramosa in the morning for the raw data we lost.
- 08: Received alarm call from answering service for Communications Net 1 alarm. Tried logging onto SCADA remotely but it would not load, likely due to computer freezing. Historian was still in fault. High lift pump was feeding West Lorne Standpipe but had just started up. Confirmed on trending that high lift and low lift pumps were off at the time of the historian fault. Reviewed historian data and we had lost data for 5 min. Will request back up data from Eramosa in the morning. Shut down high lift pump to West Lorne Standpipe in preparation to reboot the SCADA computer.
- 09: Received call from Spectrums for communications is off. Turned SCADA monitor on and historian fault banner was on for about 30 seconds then it came out of fault. The plant was on during the fault. After checking historian, we lost 20 minutes of data. Will contact Eramosa in the morning for the raw data.
- 09: Received call from Spectrums for communications is off historian fault arrived on site historian was in fault. Began to restart computer, the computer came back online. Started to check historian for lost data during the historian fault for 22 minutes and 3 minutes during computer restart. Will call Eramosa in the morning for the raw data. Monitored SCADA for 10 minutes everything appears to be ok. Prepared to leave for home.
- 09: Received call from Spectrums for communications is off. Arrived at plant, historian came out of fault. Lost data for 29 minutes called ORO to tell him the data loses are getting worse. ORO suggested I call Eramosa. Eramosa called me back and I asked them to reset the historian. Plant seems to be running fine. Preparing to leave for home. Eramosa will call when historian is reset. Discussed with ORO. Eramosa called confirming that they have reset the historian.
- 09: Received call from Spectrums for communications is off. Arrived onsite and historian was in fault. Restarted the computer. Computer came back online, going to check historian for lost data. Lost data for 84 minutes while historian was in fault and 3 while the computer restarted. Eramosa resetting the historian. Did not stop the system from losing data. It only stopped when I arrived at the plant and turned the monitor on. Monitored plant and it seems to be running fine.
- 10: Received call from Spectrums for communications is off arrived on site historian was already out of fault. Lost data for 64 minutes stayed onsite for the rest of the night as these alarms kept coming out 02:51 received alarm for communications is off. Lost data for 91minutes. Received alarm for communications is off. Lost data for 23 minutes. Will contact Eramosa to receive raw data. Received alarm for

communications is off. Lost data for 6 minutes. Will contact Eramosa to receive raw data. Received alarm for communications is off. lost data for 16 minutes. Will contact Eramosa to receive raw data.

- 10: Received alarm call from answering service for Possible Data Historian Fault. Checked remote SCADA but could not connect likely due to computer being frozen. Checked SCADA computer and it was out of the historian fault state. Computer currently seems okay and not slow. Checked historian data and we lost data for 36min. Low lift and High lift pumps were off during this time. Notified ORO. Will contact Eramosa for the raw data tomorrow morning.
- 10: Received alarm call from answering service for possible data historian fault. Checked remote SCADA but could not connect likely due to computer being frozen. Checked SCADA computer and it was out of the historian fault state. Checked historian data and we lost data for 56min. High lift pump was feeding Wallacetown tower during this time. Notified ORO. Will contact Eramosa for the raw data tomorrow morning. Operator now staying onsite for the rest of the night to deal with alarms coming in. Received alarm call from answering service for possible data historian fault. Checked SCADA computer and the screen would not turn on. Tried pressing the power button on the computer and the screen turned on. Historian was out of alarm state when the screen turned on. High lift pump was feeding the Wallacetown tower during this time. Checked historian data and we lost data for 11min. Will contact Eramosa for the raw data tomorrow. Notified ORO and I will call Eramosa's 24/7 support helpline. Spoke with Neil from Eramosa. He said there wasn't anything he could do to solve the historian fault alarm frequency issue for tonight. He said the only thing he could do would be to reset the historian, but this has been tried many times recently with no positive effect. Neil will relay to his bosses in the morning about our increased frequency in historian faults. Rebooted SCADA computer to try and help reduce historian fault frequency. Shut down high lift pump that was feeding the Wallacetown tower prior to shutdown. After the reboot, checked historian data and we lost 3 min of data. Will contact Eramosa for the raw data in the morning.
- 11: Received alarm call from answering service for possible data historian fault. Received alarm call from answering service for possible data historian fault. Received alarm call from answering service for possible data historian fault. 02:55 Received alarm call from answering service for possible data historian fault. 04:06 Received alarm call from answering service for possible data historian fault. 04:45 Received alarm call from answering service for possible data historian fault. 05:25 Received alarm call from answering service for possible data historian fault. 06:37 Received alarm call from answering service for possible data historian fault. 07:16 Received alarm call from answering service for possible data historian fault.
- 27: Received call from Spectrum for discharge chlorine analyzer. Logged onto SCADA and observed AIT-7004 chlorine to be at 0.99ppm. West Lorne Tower was at 33.03m. High lift pumps turned on when tower is to hit 33.0m. Once high lift pumps started, the residual at AIT-7004 increased to 1.10pm. Residual at AIT-7001 reading 1.19ppm. High lift pumps currently sending water to West Lorne Standpipe and Wallacetown Tower. Will continue to monitor remotely. Arrived onsite, started high lift pumps to West Lorne Standpipe and verified residuals at AIT-7001 and AIT-7004. AIT-7001 currently reading 1.30ppm and AIT-7004 currently reading 1.31ppm. West Lorne Standpipe at 34.82m, Wallacetown at 10.88m, storage tanks at 7.82m and 7.94m. Completed plant walk through, all appears to be working well.

## MARCH

- 04: Received alarm call for Wallacetown tower communication loss. Tried logging onto remote SCADA but could not connect to VPN. Started preparing to leave for the TCWTP. High lift was on feeding Wallacetown tower. Upon arrival, saw that the SCADA screen was blank, as well as the PALL screen on the PALL computer. Began trying to look in PLC panel for issues. Checked the historian data and found it was not recording. Notified ORO and shut down high lift pump, and placed the racks in Idle to prevent plant from starting up. Waiting on a call back from Eramosa. Tried unplugging equipment plugged into UPS in network room and comms returned to both the SCADA and PALL computers in control room. Checked historian data and it is recording again. It was not recording for 130min. Contacted Eramosa to send over the raw data for this time period. Issue may have occurred due to a suspected power flicker. Will continue to monitor. Notified ORO and PCT.
- 07: Received alarm call from Spectrum for West Lorne Standpipe LO level alarm. Logged onto remote SCADA and saw the level was at 28.60m. Observed the high lift pumps cycling taking turns turning on and then off

as PRV-7061 was failing to open. Changed the standpipe start set-point down from 33m to 26m to prevent the high lift pumps deadheading. Started preparing to leave for site. Cycled power to valve PRV-7061. Changed standpipe start set-point back from 26m to 33m and valve PRV-7061 started opening normally upon high lift start-up. Will continue to monitor. Observed standpipe fill for 40min and PRV-7061 appears to be working fine.

## **SECOND QUARTER:**

### **APRIL**

- 12: Received alarm call from Spectrum for high lift and low lift faults. Logged onto remote SCADA and saw high lift pumps 1, 2, and 3 faulted, as well as low lift pumps 1, 2 and 4 faulted out. Acknowledged alarm and cleared faults. No other issues appear present. Due to suspected power flicker. Started up high lift and plant and will continue to monitor.
- 14: Received alarm call from Spectrum for WTP intrusion. Upon entry into foyer, the alarm system was going off and the display screen on the alarm system read Front Door. The front doors were 100% closed and locked upon arrival, but there are very high winds in the area and the door may have been propped open millimeters by strong gusts of wind which could still have tripped the sensors.
- 14: Received alarm from Spectrum for low lift pump fault. Logged onto remote SCADA and saw low lift pump LLP-1010 and high lift pump HLP-7030 had both faulted out. Low lift pumps 3 and 4 were running. Clicked the fault reset button for the low lifts and high lifts and acknowledged the alarm. Low lift pump LLP-1040 and high lift pump HLP-7040 were on. Placed LLP-1010 and HLP-7030 into duty 1 and will monitor. Watched both faulted out pumps run for 30min and no issues arose. Issue believed to be due to power flicker caused by high winds in area. Wind gusts are currently at 59km/hr on weather network.
- 19: Received alarm call from Spectrum for filtrate storage tank fault. Logged onto remote SCADA and saw a high lift pump to West Lorne was running, the duty storage tank level was in LO level at 6.30m and no low lift pump was running. Low Lift PLC to PALL Communications Failure came out of alarm state on its own, likely a communications blip. Reset low lift pumps and attended site. Two low lift pumps were on and running okay upon arrival.

### **MAY**

- 29: Received call from Spectrum for filtrate storage tank full. Duty storage tank 6010 level was 6.45 m. LLP 1030 was in fault, and LLP 1010 was running. West Lorne train had finished filling and was at 35.15 m and Wallacetown was currently filling and was at 9.69 m. Placed rack 4 into FF to help plant fill faster. Acknowledged and reset alarms on SCADA and went to reset VFD for LLP 1030. Plant filling and all appears ok. Will continue to monitor remotely.

### **JUNE**

- 07: Received call from spectrum for Channel 23, chemical containment flood at 20:20. Day operator cleaned floor in chemical room and water leaked into the containment causing alarm.
- 14: Received alarm call from Spectrum for WTP generator running.
- 30: Received call from Spectrum for Filtrate Storage Tank Fault.

## **SECTION 8: COMMUNITY COMPLAINTS & CONCERNS**

### **FIRST QUARTER:**

No complaints or concerns this quarter.

### **SECOND QUARTER:**

No complaints or concerns this quarter.

**TRI-COUNTY WATER BOARD**

2023 Budget and Multi-Year Forecast

		<u>2023 Budget</u>	<u>2024 Forecast</u>	<u>2025 Forecast</u>	<u>2026 Forecast</u>	<u>2027 Forecast</u>	<u>2028 Forecast</u>
<b>Revenues</b>							
02-7315-6110	BANK INTEREST - <b>Note 1</b>	-\$ 10,567.16	-\$ 18,287.74	-\$ 15,767.04	-\$ 19,790.34	\$ 687.23	\$ (2,312.77)
02-7315-6590	Water Revenue - Municipalities - <b>Note 2</b>	- 1,465,703.97	- 1,577,143.32	- 1,648,616.51	- 1,723,399.77	- 1,781,942.86	- 1,815,926.03
02-7315-6591	Capital Replacement - <b>Note 3</b>	- 150,000.00	- 150,000.00	- 150,000.00	- 150,000.00	- 150,000.00	-
<b>Expenses</b>							
02-7315-7500	HYDRO - <b>Note 4</b>	265,200.00	270,504.00	275,914.08	281,432.36	287,061.01	292,802.23
02-7315-7501	GAS - <b>Note 4</b>	23,460.00	23,929.20	24,407.78	24,895.94	25,393.86	25,901.74
02-7315-7510	INSURANCE - <b>Note 5</b>	22,617.63	23,069.98	23,531.38	24,002.01	24,482.05	24,971.69
02-7315-7511	Property Taxes - <b>Note 6</b>	69,520.57	69,520.57	70,910.98	72,329.20	73,775.78	75,251.30
02-7315-7520	Grounds Maintenance - Phragmites Control - <b>Note 7</b>	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
02-7315-7529	ADMINISTRATION EXPENSE - <b>Note 8</b>	7,717.50	7,871.85	8,029.29	8,189.87	8,353.67	8,520.74
02-7315-7532	LICENSES & PERMITS - <b>Note 9</b>	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,020.00
02-7315-7601	TELEPHONE & INTERNET - <b>Note 10</b>	8,976.00	9,155.52	9,338.63	9,525.40	9,715.91	9,910.23
02-7315-7675	LEGAL - <b>Note 11</b>	1,000.00	1,000.00	20,000.00	1,000.00	1,000.00	1,000.00
02-7315-7676	AUDIT - <b>Note 12</b>	3,765.12	5,000.00	5,100.00	5,202.00	5,306.04	5,412.16
02-7315-7680	CONTRACTED SERVICES - <b>Note 13</b>	470,000.00	557,000.00	568,140.00	579,502.80	591,092.86	602,914.71
02-7315-7681	Asset Management - <b>Note 14</b>	20,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,100.00
02-7315-7900	Transfer to Reserves - <b>Note 15</b>	150,000.00	150,000.00	201,165.15	150,000.00	588,566.46	601,812.00
02-7315-7901	TRANSFER FROM RESERVES - <b>Note 15</b>	- 292,328.69	- 276,035.07	-	- 1,173,878.43		
02-7315-8000	CAPITAL OVER \$10,0000 - see Capital Schedule	870,343.00	893,415.00	596,846.25	1,899,988.95	305,508.00	158,622.00
		<b>\$ 0.00</b>	<b>-\$ 0.00</b>	<b>\$ 0.00</b>	<b>-\$ 0.00</b>	<b>\$ 0.00</b>	<b>-\$ 0.00</b>

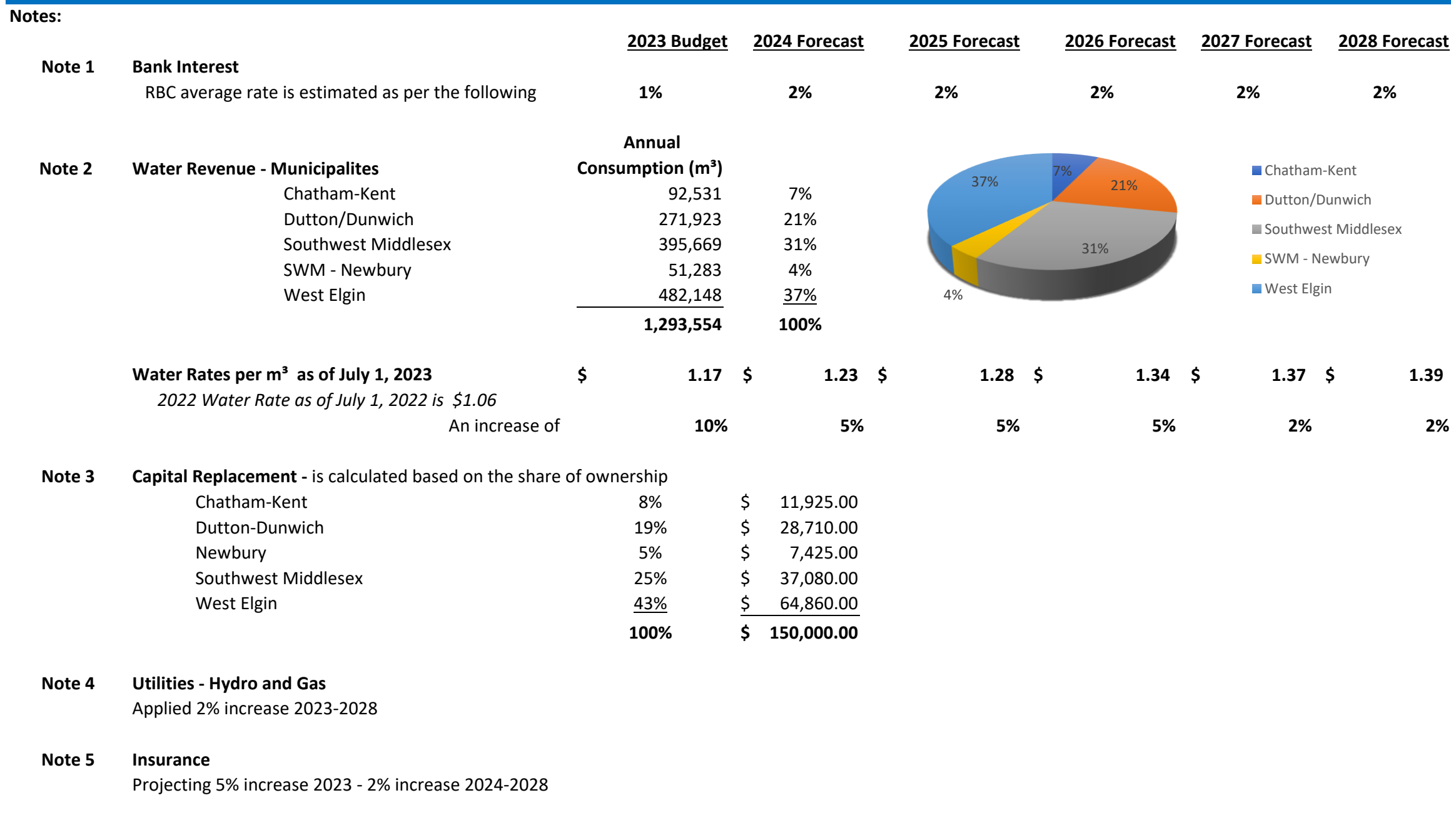
Notes:							
		<u>2023 Budget</u>	<u>2024 Forecast</u>	<u>2025 Forecast</u>	<u>2026 Forecast</u>	<u>2027 Forecast</u>	<u>2028 Forecast</u>
Note 1	<b>Bank Interest</b>						
	RBC average rate is estimated as per the following	1%	2%	2%	2%	2%	2%
Note 2	<b>Water Revenue - Municipalities</b>	<b>Annual Consumption (m³)</b>					
	Chatham-Kent	92,531	7%				
	Dutton/Dunwich	271,923	21%				
	Southwest Middlesex	395,669	31%				
	SWM - Newbury	51,283	4%				
	West Elgin	482,148	37%				
		<u>1,293,554</u>	<u>100%</u>				
	<b>Water Rates per m<sup>3</sup> as of July 1, 2023</b>	\$ 1.17	\$ 1.23	\$ 1.28	\$ 1.34	\$ 1.37	\$ 1.39
	2022 Water Rate as of July 1, 2022 is \$1.06						
	An increase of	10%	5%	5%	5%	2%	2%
Note 3	<b>Capital Replacement</b> - is calculated based on the share of ownership						
	Chatham-Kent	8%	\$ 11,925.00				
	Dutton-Dunwich	19%	\$ 28,710.00				
	Newbury	5%	\$ 7,425.00				
	Southwest Middlesex	25%	\$ 37,080.00				
	West Elgin	<u>43%</u>	<u>\$ 64,860.00</u>				
		<b>100%</b>	<b>\$ 150,000.00</b>				
Note 4	<b>Utilities - Hydro and Gas</b>						
	Applied 2% increase 2023-2028						
Note 5	<b>Insurance</b>						
	Projecting 5% increase 2023 - 2% increase 2024-2028						

Notes:

		<u>2023 Budget</u>	<u>2024 Forecast</u>	<u>2025 Forecast</u>	<u>2026 Forecast</u>	<u>2027 Forecast</u>	<u>2028 Forecast</u>
<b>Note 1</b>	<b>Bank Interest</b>						
	RBC average rate is estimated as per the following	<b>1%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>
<b>Note 2</b>	<b>Water Revenue - Municipalites</b>	<b>Annual Consumption (m³)</b>					
	Chatham-Kent	92,531	7%				
	Dutton/Dunwich	271,923	21%				
	Southwest Middlesex	395,669	31%				
	SWM - Newbury	51,283	4%				
	West Elgin	482,148	37%				
		<b>1,293,554</b>	<b>100%</b>				
	<b>Water Rates per m³ as of July 1, 2023</b>	<b>\$ 1.17</b>	<b>\$ 1.23</b>	<b>\$ 1.28</b>	<b>\$ 1.34</b>	<b>\$ 1.37</b>	<b>\$ 1.39</b>
	<i>2022 Water Rate as of July 1, 2022 is \$1.06</i>						
	An increase of	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>5%</b>	<b>2%</b>	<b>2%</b>
<b>Note 3</b>	<b>Capital Replacement</b> - is calculated based on the share of ownership						
	Chatham-Kent	8%	\$ 11,925.00				
	Dutton-Dunwich	19%	\$ 28,710.00				
	Newbury	5%	\$ 7,425.00				
	Southwest Middlesex	25%	\$ 37,080.00				
	West Elgin	43%	\$ 64,860.00				
		<b>100%</b>	<b>\$ 150,000.00</b>				
<b>Note 4</b>	<b>Utilities - Hydro and Gas</b>						
	Applied 2% increase 2023-2028						
<b>Note 5</b>	<b>Insurance</b>						
	Projecting 5% increase 2023 - 2% increase 2024-2028						

A 3D pie chart illustrating the distribution of annual water consumption across five municipalities. The segments are labeled with their respective percentages: Chatham-Kent (37%), Dutton/Dunwich (21%), Southwest Middlesex (31%), SWM - Newbury (4%), and West Elgin (7%). A legend to the right identifies each color-coded segment.

Municipality	Percentage
Chatham-Kent	37%
Dutton/Dunwich	21%
Southwest Middlesex	31%
SWM - Newbury	4%
West Elgin	7%



<b>Note 6</b>	<b>Property Taxes</b> Applied 2% increase 2023-2028		
<b>Note 7</b>	<b>Grounds Maintenance - Phragmites Control</b> Annual maintance will continue 2023-2028		
<b>Note 8</b>	<b>Administration Expense</b> Proposing 5% increase in 2023 and 2% increase 2024-2028		
<b>Note 9</b>	<b>Licenses and Permits</b> Annual fees		
<b>Note 10</b>	<b>Telephone &amp; Internet</b> Applied 2% increase 2023-2028		
<b>Note 11</b>	<b>Legal</b> Ontario Regulation 453/07 requires preperation of Financial Plan every six years.		
<b>Note 12</b>	<b>Audit</b> Three year contract with Scrimgeour & Co. expires in 2023.		
<b>Note 13</b>	<b>Contracted Services</b> OCWA contract expires Dec. 31, 2023		
<b>Note 14</b>	Asset Management		
	OCWA to provide detail asset list	\$	15,000.00
	Software License Fees	\$	5,000.00
<b>Note 15</b>	<b>Transfer to Reserves</b> Additional funds collected from municipalities for the capital replacement		

<b>Reserves:</b>	<b><u>2023 Forecast</u></b>	<b><u>2024 Forecast</u></b>	<b><u>2025 Forecast</u></b>	<b><u>2026 Forecast</u></b>	<b><u>2027 Forecast</u></b>	<b><u>2028 Forecast</u></b>
<b>Beginning Balance - Jan 1</b>	<b>1,056,715.60</b>	<b>\$ 914,386.91</b>	<b>\$ 788,351.84</b>	<b>\$ 989,516.99</b>	<b>-\$ 34,361.44</b>	<b>\$ 115,638.56</b>
Transfer to Reserves - Capital	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	-
Transfer to Reserves - Surplus	-	-	51,165.15	-	-	-
Transfer from Reserves	- 292,328.69	- 276,035.07	-	- 1,173,878.43	-	-
<b>Ending Balance - Dec 31</b>	<b>\$ 914,386.91</b>	<b>\$ 788,351.84</b>	<b>\$ 989,516.99</b>	<b>-\$ 34,361.44</b>	<b>\$ 115,638.56</b>	<b>\$ 115,638.56</b>

## Tri-County WTP

(2022-Year Recommended Capital/Major Maintenance from 2023 to 2028)

The Ontario Clean Water Agency has identified the following capital projects/major maintenance for your review and approval.

Ref.	Scope of Work	Cost Estimate						Compliance	DWQMS RA Outcome*	Health & Safety	Repair / Maintenance	Lifecycle Replacement	Improvement	Spare Parts Inventory	Approved by Client	Rationale for Project
		2023	2024	2025	2026	2027	2028									
	<b>Treatment Plant</b>															
1	Intake Structure Inspection				\$10,000	\$0			●	●	●				●	Last inspected in 2021. Recommended every 5 years
2	pH Control System-Operating Costs	\$13,000						●			●			●		Annual Costs for O&M of system
3	SCADA/PLC Upgrades-Based off of 2021 Report	\$221,000	\$166,000	\$47,338	\$0	\$0	\$0	●			●		●			SCADA/PLC/Software Upgrades based on 2021 Study
4	Chemical Transfer Pump Replacement	\$4,000		\$4,000		\$4,000						●				Transfer Pumps for CIP System. Life cycle replacement
5	Chlorine/Peroxide Feed Pump Replacement	\$8,000					\$8,000	●				●				Life Cycle Replacement
6	Chlorine Analyzer Replacement	\$6,500	\$6,500	\$6,500	\$6,500	\$6,500	\$6,500	●	●			●	●			Life Cycle Replacement, Technology Improvements
7	Chlorine Gas Dosing System	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500		●	●	●	●	●	●		Continuous Improvement/Inspection/Replacement of old piping
8	UV System	\$4,000	\$4,000	\$4,000	\$4,000	\$20,000	\$20,000		●		●	●		●		Requires annual service and complete rebuild every 5 years
9	Storage Tank Inspections		\$10,000						●		●					Inspection recommended every 5 years
10	Storage Tanks Interior re-sealing			\$40,000							●					Recommended in 2019 inspection for 2025
11	Air Manifold Airline and Card replacement	\$11,000				\$12,000	\$12,000					●				4 year Life Cycle Replacement
12	Naturalized Settling Ponds-Phragmites Control										●		●			Continued Control of invasive Phragmites
13	PALL Health Check	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000				●		●			Annual Health Check on PALL Membrane System
14	Replacement of PALL Membranes	\$300,000	\$300,000	\$300,000	\$300,000	\$0	\$0		●			●				Life Cycle Replacement
15	Assets Management Plan	\$15,000														
16	Recommendations from "Yellow Water Study"															
17	Replacing SCBA Equipment	\$8,000								●		●				Current equipment out of date
	<b>Total Estimate - Recommended Capital</b>	<b>\$610,000</b>	<b>\$506,000</b>	<b>\$421,338</b>	<b>\$340,000</b>	<b>\$62,000</b>	<b>\$66,000</b>									
	<b>Highlift and Lowlift Pumps &amp; Motors</b>															
1	Lowlift motors: Replacement of Soft Starters with VFD's	\$25,000										●	●			Continued upgrading to remaining Pump
2	Highlift motors: Replacement of Soft Starters with VFD's	\$40,000										●	●			Continued upgrading to remaining Pump
3	Highlift motor/pump rebuild					\$15,000	\$15,000		●		●					Rebuilds after regular wear and tear
4	Lowlift motor/pump rebuild					\$20,000	\$20,000		●		●					Rebuilds after regular wear and tear
	<b>Total Estimate - Recommended Capital</b>	<b>\$65,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$35,000</b>	<b>\$35,000</b>									
	<b>Structural (includes piping/control, PRV's, Valves, Building envelope, HVAC, chambers)</b>															
1	Raw wetwell maintenance/repairs	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000		●		●		●			Annual contingency for clean out
2	HVAC Repairs or Upgrades	\$5,000		\$5,000		\$75,000					●	●				Repairs and Maintenance to HVAC
3	Settling Tank Clean Outs	\$15,000			\$15,000			●								Sediment Tanks need cleaning every 3 years
4	Lowlift and Associated Building Repairs Fund (IRC BCA Recommendations)		\$201,278	\$15,489	\$92,318	\$71,426	\$15,549			●	●	●	●			Based off of IRC BCA Report completed 2021
5	WTP Building Fund (IRC BCA Recommendations)	\$9,898	\$26,593	\$70,598	\$44,481	\$11,391	\$2,520			●	●	●	●			Based off of IRC BCA Report completed 2021
6	Discharge Header: Repair/Replace failing stainless steel piping	\$50,000	\$50,000						●		●	●	●			Stainless steel throughout plant is failing.
	<b>Total Estimate - Recommended Capital</b>	<b>\$89,898</b>	<b>\$287,871</b>	<b>\$101,087</b>	<b>\$161,799</b>	<b>\$167,817</b>	<b>\$28,069</b>									
	<b>Standpipe, Transmission Main, Remote Chambers</b>															
1	West Lorne Standpipe Refurbishment/Repainting Reserve Contribution				\$1,350,000							●	●			The 2020 Inspection identified that the interior and exterior surfaces require full removal and replacement within 3 to 6 years timeline. Proposes to create reserve for funding of this project. Estimated total project cost of \$1,350,000
2	Remote Chamber Refurbishment	\$30,000	\$30,000								●	●	●			Continued Upgrades to Remote Chambers
3	West Lorne Standpipe Inspection			\$12,000				●	●							Recommended to inspect every 5 Years.
4	UPS Replacement	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500					●				Life cycle replacement to critical UPS
	<b>Total Estimate - Recommended Capital</b>	<b>\$31,500</b>	<b>\$31,500</b>	<b>\$13,500</b>	<b>\$1,351,500</b>	<b>\$1,500</b>	<b>\$1,500</b>									



## Tri-County WTP

(2022-Year Recommended Capital/Major Maintenance from 2023 to 2028)

The Ontario Clean Water Agency has identified the following capital projects/major maintenance for your review and approval.

Ref.	Scope of Work	Cost Estimate						Compliance	DWQMS RA Outcome*	Health & Safety	Repair / Maintenance	Lifecycle Replacement	Improvement	Spare Parts Inventory	Approved by Client	Rationale for Project
		2023	2024	2025	2026	2027	2028									
	Operations and Maintenance Contingency															
1	Strainers:Purchase of Critical Spare Parts	\$5,000	\$5,000	\$5,000					●					●		
2	Smart Positioner Inventory	\$5,000		\$5,000		\$5,000						●		●		Critical Component for filter operation
3	Pneumatic Actuators	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000		●			●		●		Critical Component for filter operation
4	Rack Butterfly valves	\$2,000		\$2,000		\$2,000						●		●		Critical Component for filter operation
5	UPS Replacement	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500					●		●		Important to replace before failure or have inventory
6	In-plant Process Motors/Pumps	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000		●			●				Placeholder for emergency repairs
7	Emergency Misc.	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000				●					Placeholder for emergency repairs
	Total Estimate - Recommended Capital	\$32,500	\$25,500	\$32,500	\$20,500	\$27,500	\$20,500									
	Grand Total	\$828,898	\$850,871	\$568,425	\$1,873,799	\$293,817	\$151,069									
	Contingency-5%	\$41,445	\$42,544	\$28,421	\$26,190	\$14,691	\$7,553									
	Total Capital Estimate	\$870,343	\$893,415	\$596,846	\$1,899,989	\$308,508	\$158,622									

2023 Recommended Capital Presented by:  
2023Recommended Capital Approved by:

Name: Sam Smith  
Name

\* **NOTE** : a requirement of DWQMS v. 2.0 is to consider the outcomes of the risk assessment (RA) documented under Element 8 as part of the system's infrastructure review

Legend:

H

High priority recommended to be completed in upcoming year

M

Medium priority recommended to be completed in 1 to 3 years

L

Low priority recommended to be completed in years 4 to 5