



Union Water Supply System Inc.

Board of Directors Meeting

Wednesday, March 26, 2025

9:00 am

Roma Club Leamington

19 Seacliff Drive

AGENDA

- A. **Call to Order:**
- B. **Welcoming Remarks**
- C. **Disclosures of Pecuniary Interest:**
- D. **Approval of Minutes:**
Minutes of the Board of Directors Meeting held on Wednesday, January 29, 2025.
Pages 2 - 8
- E. **Business Arising Out of the Minutes**
- F. **Items for Consideration:**
 - 1. UWSS/04/25 dated February 21, 2025 re: 2024 Summary Report for Municipalities under Regulation 170/03 made under the Safe Drinking Water Act
Pages 9 - 17
 - 2. Verbal update on existing UWSS ongoing projections, operations and initiatives
 - 3. UWSS/05/25 dated March 19, 2025 re: Approval for Reservoir #3 Construction
Pages 18 - 22
 - 4. UWSS/06/25 dated March 19, 2025 re: De-chlorination System Construction
Budget Approval
Pages 23 - 25
- G. **New Business:**
- H. **Action Items:**
- I. **Comments, Announcements, and Other Business:**
- J. **Adjournment:**
- K. **Date of Next Meeting:** May 21st, 2025, 9:00am location to be determined.

**Board of Directors
Meeting**

Wednesday, January 29, 2025
9:00 am
Roma Club
19 Seacliff Drive, Leamington



MINUTES

Directors Hilda MacDonald (Chair)
 Kim DeYong (Vice Chair)
 Sherry Bondy - virtual participation
 Kirk Walstedt
 Dennis Rogers
 Mike St. Amant
 Lori Atkinson - absent
 Tom Kissner
 Sebastian Schmoranz - absent
 John Tofflemire
 Wayne Wharram
 Larry Verbeke

Also in Attendance: Rodney Bouchard, UWSS Inc. Chief Executive Officer
For UWSS Khristine Johnson, UWSS Inc. Office Administrator
 Andrew Plancke, UWSS Inc. Special Projects Manager

Guest Sabrina Nazzani, Capital Assist (Valuation) Inc. - CFO
 William Willis, Willis Business Law - Legal

OCWA Staff Robin Trepanier, Dale Dillen

Municipal Staff Shaun Martinho, Erica Allen - Town of Kingsville
Present Rob Mackie - Town of Essex

Call to Order: 9:01 am

Land Acknowledgement

The Union Water Supply System Inc. Board of Directors acknowledges that this land is the traditional territory of the Three Fires Confederacy of First Nations, comprised of the Ojibway, the Odawa, and the Potawatomie Peoples and specifically, the traditional territory of the Caldwell First Nation. The UWSS Board of Directors values the significant historical and contemporary contributions of local and regional First Nations and all of the

Original Peoples of Turtle Island - North America who have been living and working on the land from time immemorial.

Welcoming Remarks:

The CEO welcomes everyone to the meeting. He would like to provide a few small updates on the first year of UWSS Inc. He notes that 2024 was a good first full year as an incorporated entity, with a lot of things happening. He confirms that all of the assets were transferred over from the Joint Board of Management to UWSS Inc. Additional support staff were retained in 2024 including a virtual CFO (Sabrina Nazzani) who developed a new financial and budget system for UWSS Inc.

From a capital works perspective there was a lot that happened: the alternative plan for delivery of capital projects took shape, DAF phase 2 started, plans for the third reservoir are moving forward as well, the Construction Management Advisor (CMA) was recruited, and so far, the UWSS is seeing the benefits of this new strategy. He believes more municipalities are looking to go with the CMA to assist with pricing and project management. He also confirms that more municipalities are looking at the UWSS Inc. Joint Municipal Services Corporation Business model.

The CEO notes that there is a lot of work to be completed in 2025, including activating the Governance and Audit Committee (GAC), renewal of the OCWA Contract, and continue moving forward with major capital infrastructure projects.

Election

The CEO explains the rules of the election and notes that the Governance & Audit Committee (GAC) will be reviewing this process over the coming year, so there may be some changes.

He calls for nominations of for the position of Chair.

Director DeYong nominates Director MacDonald. She accepts the nomination. The CEO calls for a seconder, which is Director Rogers. He calls for any further nominations and then a third and final time, and seeing none, asks for a motion to receive Director MacDonald as Chair of the UWSS Inc. Board of Directors.

No. UWSS-01-25

Moved by: Director Verbeke

Seconded by: Director Walstedt

That Director MacDonald is nominated to the position of Chair for the Union Water Supply System Inc. Board of Directors.

Carried

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Chair MacDonald then speak to the Board of Directors and thanks members for the vote of confidence and then thanks the CEO for his leadership during the last year of transition.

The Chair calls for nominations for the position of Vice Chair.

Director Rogers nominates Director DeYong. She accepts the nomination. The Chair calls for a seconder, which is Director Walstedt. She calls for any further nominations and then a third and final time, and seeing none, asks for a motion to receive Director DeYong as Vice Chair of the UWSS Inc. Board of Directors.

No. UWSS-02-25

Moved by: Director Verbeke

Seconded by: Director Rogers

That Director DeYong is nominated to the position of Vice Chair for the Union Water Supply System Inc. Board of Directors.

Carried

Disclosure of Pecuniary Interest: none

Adoption of Board Minutes:

No. UWSS-03-25

Moved by: Director St. Amant

Seconded by: Director Rogers

That the minutes of the Union Water Supply System Inc. Board of Directors for the following meetings are received:

- Minutes of the UWSS Inc. Board of Directors meeting held on November 20, 2024

Carried

Business Arising out of Minutes:

There was none.

Items for Consideration

Report UWSS/02/25 dated January 24, 2025 re: Annual Report under the Safe Drinking Water Act and Ontario Regulation 170/03

The CEO explains that this a yearly report completed on UWSS's behalf by OCWA Compliance staff. He notes that this report will be shared with the shareholder municipalities and also shared on our website. He notes that UWSS is currently going

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through their inspection, with a new inspector, which is presenting some challenges. He also notes a few minor changes that will be made to the Annual Report prior to posting.

He then directs members to the expenditures for the year and the low water pressure event that occurred on County Rd 34 in July 2024.

Director DeYong asks why this report does not mention the number of main breaks. The CEO notes that the Summary report, coming in March, should address those items.

No. UWSS-04-25

Moved by: Director Kissner

Seconded by: Director St. Amant

That report UWSS/02/25 dated January 24, 2025, re: 2024 Annual Report under the Safe Drinking Water Act and Ontario Regulation 170/03 is received.

Carried

Report UWSS/03/25 dated January 24, 2025, re: Proposed 2025 UWSS Inc. Operations and Capital Budget

The CEO displays a budget presentation, reviewing the summary of the UWSS system and the components that make up the proposed 2025 UWSS Budget.

He then reviews the water demand chart and confirms that he will be obtaining further information from the municipalities, and this does not consider unaccounted for water. He directs their attention to the increase in water demand since 2015; from greenhouse growth and residential growth in the area. He also confirms that UWSS has provided water to Wheatley, and Colchester, not significant, but still noticeable amounts.

The CEO reminds the Directors that there is still a moratorium in place for large service applications. He confirms that the EA for the treatment capacity expansion was commenced over a year ago and hopes to have the design completed in 2025 for this plant expansion.

The CEO then hands the presentation over to our CFO, Sabrina Nazzani, who begins explaining how the budget was built and how the rates came to be. She notes the inclusion of the cost of living increase, and notes that this rate change will take place April 1, 2025, to allow enough time to true up the non-revenue /water loss numbers. She explains that UWSS is working with the shareholders' financial directors to determine who is responsible for what portions of this item.

She breaks down the rate as follows: base rate, cost of living (CPI 3.1%) and layered in levies. The levies include a capital levy to fund capital reserve to build up those funds, which will come in at \$0.02 per m³. In addition, there is a small non-water loss levy for the next three (3) years, as this item was much higher than anticipated, but is spread over those three (3) years. Finally, UWSS is introducing a levy for the plant expansion for reservoir #3, specifically for the greenhouse industry. She explains that this sector needs

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to take their share for the growth, and we don't want to burden the residents for this expansion.

The CFO explains that the increase for the average residential customer will be approximately \$1.25 extra per month or \$15/year. She notes the greenhouses can expect an extra \$250/acre/year.

Director Verbeke asks whether the large commercial industries will see this extra levy. The CEO explains that everyone, including large commercial industries will see this extra levy of \$0.02. Only Greenhouse operations will see the additional expansion related \$0.01 levy

He notes the total rate increase is \$0.0628 per cubic metre of water. He further explains, just like everywhere, prices have increased. Therefore, the total new water rate for 2025 will be \$0.7967 m³.

Director DeYong seeks clarification on non-revenue water, she asks if users are not being billed properly. The CEO explains that he is working with the municipalities on determining where some of the issues are and he continues that this is our first year dealing with these new issues, so it is taking some time to ensure every aspect is considered and covered.

The CFO continues with the budget review. She reminds everyone that the CEO and herself have been working closely with the Finance & Audit Committee (FAC). She reviews some of the items within the budget that have increased and why. She reviews the Income Statement.

She then indicates that working on the reserves will be priority in 2025 and ensuring policy development. She also notes that the funding received through WFCU is only specific to the capital projects and not operations.

Directors then have several questions regarding the distribution system, carry over budget from 2024, seasonal flows for greenhouses, as well as small vs larges, and several other small concerns. The CEO answers all those concerns.

The CEO then explains that going forward, once the system is expanded, there will be a thorough review of the application process. He will be working with the municipalities to ensure fairness across the board. There is a brief discussion on the moratorium and what is expected going forward. One Director suggests a study on development charges and reasons behind the new budget process, this will provide more data for the reasons behind this new approach.

Director St. Amant asks if this new Board has seen the moratorium information. Legal Counsel, William Willis, notes that this item was inherited from the Joint Board of Management, through a motion to adopt all of the old policies. The CEO explains that he will ensure that members have access to that information.

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Director Rogers, as Chair of the FAC, thanks the CFO and CEO for all their hard work on this budget, as well members of the FAC who worked diligently to build out this new model and budget.

No. UWSS Inc-05-25

Moved by: Director Rogers

Seconded by: Director St. Amant

That the Union Water Supply System Inc. Board of Directors (Board) adopts the Proposed 2025 Operational and Capital Budget for the Union Water Supply System;

And further, that the Board approves an increase of \$0.0628 per cubic metre for the UWSS Treatment and Transmission Rate (Rate). The new proposed Treatment and Transmission Rate for 2025 would be \$0.7967 per cubic meter;

And further, that said rate increase commences on April 1, 2025;

And further, that the Board approves a capital improvement levy of \$0.01 per cubic meter to be applied to greenhouse operations customers to support the treatment plant capacity expansion infrastructure projects.

Carried

Director DeYong leaves the meeting at 10:40 am

Consent Agenda

No. UWSS Inc-06-25

Moved by: Director Wharram

Seconded by: Director Walstedt

That item 1 through 3 on the consent agenda, BE RECEIVED, as they have been approved through the UWSS Inc. Finance & Audit Committee

1. Finance & Audit Committee Minutes of the UWSS Inc. meeting held on September 5th, 2024
2. Finance & Audit Committee Minutes of meeting held on November 13th, 2024
3. Finance & Audit Committee Minutes of meeting held on December 5, 2024

Carried

New Business

The CEO suggests that it might be better going forward to have regular Board meetings every other month, and the month in between will allow time for either the FAC or the Governance & Audit Committee (GAC) to meet. A March 26th meeting date was confirmed.

Comments, Announcements, and Other Business

There was none.

Adjournment:

No. UWSS Inc-07-25

Moved by: Director Walstedt

Seconded by: Director Verbeke

Time adjourned: 10:46 am

Date of Next Meeting: March 26, 2025 at 9:00 am at the Leamington Roma Club

/kmj

UWSS/06/24

To: UWSS Inc. Board of Directors
From: Rodney Bouchard, CEO
Date: February 21, 2025
Re: 2024 Summary Report for Municipalities under Regulation 170/03 made under the Safe Drinking Water Act



Aim:

To provide to the Board a Summary Report for Municipalities for 2024 as required under Schedule 22 of Regulation 170/03 made under the Safe Drinking Water Act 2002.

Background

Schedule 22 of O. Reg. 170/03 requires a water system owner to prepare a "Summary Report for Municipalities". This requirement is applicable only to large and small municipal residential water systems. The UWSS is classified as a large municipal residential water system since it provides drinking water to greater than 10,000 year round residents.

The Summary Report for the preceding year is to be prepared and issued by March 31st of the following year.

The Summary Report must be distributed by the owner of the water system. In particular it must be given to the council or board that owns the system. There are three (3) ownership cases described under the Schedule:

- If the water supply is owned by a municipality then all members of council are to receive the report.
- If owned by a municipal service board established under Section 195 of the Municipal Act, 2001 then all members of that board are to receive the report.
- If owned by a corporation then the board of directors is to receive the report.

Also, where a water system provides potable water to another system under contract, then the owner of the supplying system shall give, by March 31st, a copy of the Summary Report to the system being supplied. UWSS provides drinking water to the local municipal drinking water systems owned and operated by the Municipality of Lakeshore, Town of Essex, Town of Kingsville and Municipality of Leamington. A copy of this report has been provided to the shareholder municipalities.

February 21, 2025 - UWSS/04/25

Re: 2024 Summary Report under the SDWA and Ontario Reg. 170/03

The contents of the Summary Report for Municipalities must include the following:

1. A list of the requirements of the Safe Drinking Water Act and its Regulations that the water system failed to meet during the year covered including the duration of the failure.
2. A list of the requirements of the water system's Certificate of Approval, drinking water works permit or municipal drinking water license that the water system failed to meet during the year covered including the duration of the failure.
3. A list of any Orders that the water system failed to meet during the year covered including the duration of the failure.
4. For each of the above failures, a description of the measures taken to correct the failures.
5. A summary of the quantities and flow rates of the water supplied during the year covered "including monthly average and maximum daily flows and daily instantaneous peak flow rates." (Information is to enable the owner to assess the capability of the water system to meet existing and future uses.).
6. A statement that captures the comparison of the flow information above to the rated capacity and flow rates approved in the water supply's approval.

Discussion

The attached Summary Report fulfils the requirements of Schedule 22 listed above. It will also fulfil the requirements for the municipalities when it is presented to each municipal council for the municipal water supply system supplied with water by the Union Water Supply System if council so wishes.

The UWSS and its shareholder municipalities were in compliance with all requirements of Ontario Drinking Water legislation and regulations in 2024, except for the noted occurrences in the Summary Report.

Recommendation

That the Board receive the Summary Report for 2024 which fulfils the requirements of Schedule 22 of Ontario Regulation 170/03; and

That the Summary Report has been forwarded to the four (4) participating municipalities namely the Town of Kingsville, Town of Essex, Municipality of Lakeshore, and the Municipality of Leamington and presented to their councils.

Respectfully submitted,



Rodney Bouchard, CEO
Union Water Supply System Inc.

kmj



UNION WATER SUPPLY SYSTEM SUMMARY REPORT 2024

Made under Schedule 22 of Ontario Regulation 170/03, a regulation made under the Safe Drinking Water Act, 2002

EXPLANATION

Schedule 22 of Ontario Regulation 170/03, a regulation made under the Safe Drinking Water Act, 2002 requires that a large municipal residential drinking-water system that is owned by a municipality, municipal board or municipal corporation must provide to its councillors or board members a Summary Report on various aspects of the system before March 31st of the following year. The Union Water Supply System is classed as a large municipal residential drinking-water system and is therefore subject to Schedule 22.

THE SUMMARY REPORT MUST CONTAIN THE FOLLOWING:

- Requirements of the Safe Drinking Water Act, 2002 that the system failed to meet during 2024
- Any requirements of the regulations made under the Safe Drinking Water Act, 2002 that the system failed to meet in 2024
- Any condition of the drinking-water system's drinking water works permit or municipal drinking water license that the system failed to meet during 2024
- Any order that the system failed to meet in 2024, the duration of any such failure and any measures that were taken to correct such failure.
- A summary of the quantities and flow rates of water supplied by the drinking-water system by monthly average and maximum daily flow rates and instantaneous peak flow rates.
- A comparison of actual flow rates with rated capacity and flow rates in the systems approval

A drinking-water system that supplies water to another drinking water system must provide a copy of the Summary Report to that system's owner by March 31st of the year following the year covered in the Summary Report.

The sections below detail the occasions on which the Union Water Supply System (UWSS) and the connected municipal water systems failed to meet the requirements of the Safe Drinking Water Act 2002, associated regulations, system approvals and provincial officer orders in 2024.

UNION WATER SUPPLY SYSTEM (UWSS)

The following provides details of occurrences where the UWSS was not in compliance with the requirements of the Safe Drinking Water Act 2002, associated regulations, system approvals and provincial officer orders.

Non-Compliance Item:

There were seven (7) instances of non-compliances or Adverse Water Quality Incidents (AWQIs) identified for the portion of the Union Water Supply System:

- Low Pressure Event – July 25th, 2024. Pressure below 20 psi recorded entering the Cottam Booster Station (CBS).
- Six (6) notifications received that UWSS has a non-compliance with their Municipal Drinking Water License (MDWL), wherein their total chlorine residual for the lagoon discharge was running above the MDWL Performance Limit. UWSS retained Associated Engineering (AE) to design a dechlorination system that will resolve this issue. The MECP is satisfied with UWSS retention of AE to complete this upgrade for dechlorination. This project is expected to be completed by June 2025

LEAMINGTON WATER DISTRIBUTION SYSTEM

Non-Compliance Item:

There was one (1) instance of non-compliances or Adverse Water Quality Incidents (AWQIs) identified for the portion of the Leamington Distribution System that is supplied by the Union Water Supply System.

- July 3rd, 2024 – 20 total coliforms from a July 2nd Bacteriological sample at SS-L-03, resampling took place

KINGSVILLE WATER DISTRIBUTION SYSTEM

Non-Compliance Item:

There was one (1) instance of non-compliances or Adverse Water Quality Incidents (AWQIs) identified for the portion of the Kingsville Distribution System that is supplied by the Union Water Supply System.

- July 25th, 2024 – low pressure event where psi was less than 20psi, Bacteriological samples were taken, and pressure was restored

ESSEX WATER DISTRIBUTION SYSTEM

Non-Compliance Item:

There were no non-compliances or Adverse Water Quality Incidents (AWQIs) identified for the portion of the Essex Distribution System that is supplied by the Union Water Supply System.

LAKESHORE WATER DISTRIBUTION SYSTEM

Non-Compliance Item:

There was one (1) instance of non-compliances or Adverse Water Quality Incidents (AWQIs) identified for the portion of the Lakeshore Distribution System that is supplied by the Union Water Supply System.

- May 30th, 2024 – illegal hookup to a fire hydrant, upstream and downstream sampling took place following the event.

SUMMARY OF THE QUANTITIES

The following sections provide information regarding the Union Water Supply System's Permit to Take Water, issued under Ontario Regulation 387/04 and Drinking Water License issued under the Safe Drinking Water Act, 2002. Information includes the following:

- Flow Rates of Water
- Monthly Average
- Maximum Daily Flows
- Daily Instantaneous Peak Flow Rates

PERMIT TO TAKE WATER

The Union Water Supply System operated under Permit to Take Water (PTTW) Number 0816-9T9SVT, which expires January 31st, 2025, but has been extended to July 31st, 2025. The PTTW has the following flow conditions

- | | |
|--|-------------|
| • Maximum Allowable Amount Taken per Minute (Litres/Min) | 113,650 |
| • Maximum Allowable Amount Taken Per Day (Litres/Day) | 163,656,000 |

The maximum amounts of raw water taken during 2024 (see Table 1 below) are as follows:

- | | |
|--|-------------|
| • Maximum Amount Taken per Minute in 2024 (Litres/Min) | 91,068 |
| • Maximum Amount Taken Per Day in 2024 (Litres/Day) | 102,063,300 |

The system did not exceed the PTTW limits in 2024.

DRINKING WATER LICENSE

The UWSS operates under Municipal Drinking Water Licence 041-101; issue Number 7 which has been issued for the period July 18, 2021 to July 17, 2024. The Certificate of Approval and licence had the following condition:

- The drinking water system shall not be operated to exceed 124,588 m³/d (27.4 MIGD) on any calendar day, conveyed from the treatment system to the distribution system.
- The maximum daily volume of water pumped into the distribution system was 95,075m³ (20.914 MIGD).

Tables 1A through 3B below provide the monthly average, maximum and peak flows for raw and treated water for the Union Water Supply System.

TABLE 1A

2024 RAW WATER TAKING FROM LAKE ERIE IN METRIC UNITS

	Maximum Allowed Flow Rate (m3/Day)	Average Flow (m3/Day)	Maximum Flow (m3/Day)	Maximum Flow (Litres/Day)	Maximum Allowed Flow Rate (Litres/Minute)	Peak Flow (Litres/Minute)
January	163,656	50,400	61,408	61,408,430	113,650	70,170
February	163,656	57,621	65,856	65,855,910	113,650	76,870
March	163,656	66,204	82,008	82,007,550	113,650	75,162
April	163,656	64,416	73,515	73,515,090	113,650	70,842
May	163,656	74,298	96,443	96,442,780	113,650	84,627
June	163,656	83,920	102,063	102,063,300	113,650	91,068
July	163,656	84,589	97,151	97,150,590	113,650	83,428
August	163,656	83,727	98,589	98,588,530	113,650	81,674
September	163,656	77,961	91,781	91,781,470	113,650	78,480
October	163,656	62,949	86,808	86,807,560	113,650	75,419
November	163,656	51,710	60,567	60,567,130	113,650	55,647
December	163,656	40,742	46,555	46,554,660	113,650	72,510

TABLE 1B

2024 RAW WATER TAKING FROM LAKE ERIE IN IMPERIAL UNITS

	Maximum Allowed Flow Rate (MGD)	Average Flow (MGD)	Maximum Flow (MGD)	Maximum Allowed Flow Rate (Gallons/Minute)	Peak Flow (Gallons/Minute)	
January	36.00	11.09	13.51	25,000	15,435	
February	36.00	12.67	14.49	25,000	16,909	
March	36.00	14.56	18.04	25,000	16,533	
April	36.00	14.17	16.17	25,000	15,583	
May	36.00	16.34	21.21	25,000	18,615	
June	36.00	18.46	22.45	25,000	20,032	
July	36.00	18.61	21.37	25,000	18,352	
August	36.00	18.42	21.69	25,000	17,966	
September	36.00	17.15	20.19	25,000	17,263	
October	36.00	13.85	19.09	25,000	16,590	
November	36.00	11.37	13.32	25,000	12,241	
December	36.00	8.96	10.24	25,000	15,950	

TABLE 2A

2024 TREATED WATER FLOW INTO DISTRIBUTION SYSTEM IN METRIC UNITS

		Maximum Allowed Flow Rate (m3/Day)	Average Daily Flow (m3/Day)	Maximum Daily Flow (m3/Day)	Peak Instantaneous Flow (Litres/Second)	
	January	124,588	47,835	54,441	988	
	February	124,588	54,614	63,420	1,826	
	March	124,588	59,354	69,819	1,801	
	April	124,588	62,679	72,589	1,743	
	May	124,588	71,616	94,478	1,696	
	June	124,588	78,126	95,078	1,757	
	July	124,588	77,777	89,850	1,671	
	August	124,588	73,850	85,768	1,535	
	September	124,588	69,844	80,706	1,579	
	October	124,588	55,635	70,223	1,326	
	November	124,588	42,295	48,311	1,162	
	December	124,588	40,742	46,555	1,209	

TABLE 2B

2024 TREATED WATER FLOW INTO DISTRIBUTION SYSTEM IN IMPERIAL UNITS

		Maximum Allowed Flow Rate (MGD)	Average Daily Flow (MGD)	Maximum Daily Flow (MGD)	Peak Instantaneous Flow (Gallons/Second)	
	January	27.4	10.52	11.98	217	
	February	27.4	12.01	13.95	402	
	March	27.4	13.06	15.36	396	
	April	27.4	13.79	15.97	383	
	May	27.4	15.76	20.79	373	
	June	27.4	17.19	20.92	387	
	July	27.4	17.11	19.77	368	
	August	27.4	16.25	18.87	338	
	September	27.4	15.37	17.76	347	
	October	27.4	12.24	15.45	292	
	November	27.4	9.31	10.63	255	
	December	27.4	8.96	10.24	266	

TABLE 3A								
2024 TREATED FLOW TO LOCAL MUNICIPALITIES IN METRIC UNITS								
	<u>Leamington</u>		<u>Kingsville</u>		<u>Essex</u>		<u>Lakeshore</u>	
	Monthly Total (m3)	Average Day (m3/day)	Monthly Total (m3)	Average Day (m3/day)	Monthly Total (m3)	Average Day (m3/day)	Monthly Total (m3)	Average Day (m3/day)
January	734,275	23,686	621,950	20,063	69,004	2,226	54,962	1,773
February	803,485	27,706	662,547	22,846	68,988	2,379	50,825	1,753
March	1,028,586	33,180	828,092	26,713	70,658	2,279	50,753	1,637
April	1,017,954	33,932	626,962	20,899	62,844	2,095	46,629	1,554
May	1,308,994	42,226	774,594	24,987	83,759	2,702	60,060	1,937
June	1,292,728	43,091	809,738	26,991	85,274	2,842	49,967	1,666
July	1,429,064	46,099	952,107	30,713	97,656	3,150	56,825	1,833
August	1,233,438	39,788	865,920	27,933	81,937	2,643	48,854	1,576
September	1,195,486	39,850	918,476	30,616	84,107	2,804	50,683	1,689
October	929,640	29,988	636,040	20,517	71,149	2,295	43,632	1,407
November	721,139	24,038	418,111	13,937	68,988	2,300	37,898	1,263
December	771,162	24,876	416,625	13,440	85,245	2,750	45,249	1,460
Total	12,465,951	34,038	8,531,162	23,305	929,609	2,539	596,337	1,629

TABLE 3B
2024 TREATED FLOW TO LOCAL MUNICIPALITIES IN IMPERIAL UNITS

	<u>Leamington</u>		<u>Kingsville</u>		<u>Essex</u>		<u>Lakeshore</u>	
	Monthly Total (Imperial Gallons)	Average Day (MGD)	Monthly Total (Imperial Gallons)	Average Day (MGD)	Monthly Total (Imperial Gallons)	Average Day (MGD)	Monthly Total (Imperial Gallons)	Average Day (MGD)
January	161,517,920	5.21	136,809,874	4.41	15,178,758	0.49	12,089,950	0.39
February	176,741,991	6.09	145,739,966	5.03	15,175,239	0.52	11,179,937	0.39
March	226,257,289	7.30	182,154,775	5.88	15,542,587	0.50	11,164,099	0.36
April	223,918,576	7.46	137,912,360	4.60	13,823,747	0.46	10,256,946	0.34
May	287,938,426	9.29	170,386,860	5.50	18,424,404	0.59	13,211,353	0.43
June	284,360,406	9.48	178,117,459	5.94	18,757,658	0.63	10,991,203	0.37
July	314,350,134	10.14	209,434,261	6.76	21,481,317	0.69	12,499,753	0.40
August	271,318,430	8.75	190,475,771	6.14	18,023,620	0.58	10,746,378	0.35
September	262,970,157	8.77	202,036,475	6.73	18,500,954	0.62	11,148,701	0.37
October	204,492,212	6.60	139,909,241	4.51	15,650,592	0.50	9,597,698	0.31
November	158,628,404	5.29	91,971,562	3.07	15,175,239	0.51	8,336,395	0.28
December	169,631,925	5.47	91,644,688	2.96	18,751,279	0.60	9,953,389	0.32
Total	2,742,125,871	7.49	1,876,593,292	5.13	204,485,393	0.56	131,175,802	0.36

To: UWSS Inc. Board of Directors
From: Rodney Bouchard, UWSS Inc. CEO
Date: March 19, 2025
Re: Approvals for Reservoir #3 Construction



Recommendation:

That the Union Water Supply System Inc. Board of Directors (Board) approves a budget of \$57,000,000 for the construction of Reservoir #3 and the associated Lift Station.

And further, that the Board approves the award of Reservoir #3 and Lift Station Early Works Package to Alberici Constructors Limited (ACL) in the amount of \$13,452,905.

And further, that the Board authorizes UWSS Inc. Management to set-aside an additional UWSS Inc. controlled provisional dewatering allowance outside of the GMP of \$1,000,000 that will be only drawn upon if the dewatering requirements are above and beyond what is currently carried as a base amount in the ACL's Early Works Package price.

Background:

At the July 19, 2023 meeting of the Union Water Supply System Board (Board), the Board authorized UWSS management to implement a Construction Management Contract project delivery approach for the proposed Reservoir #3 construction project at the Ruthven Water Treatment Plant.

Construction Management is a common delivery method used in the various industries to fast-track projects. It typically consists of two phases: (1) Construction Manager as Advisor/Agent (CMA) and (2) Construction Manager at Risk (CMAR). CMA/CMAR is a preferred approach for complex projects involving upgrades to existing facilities. As part of this delivery method, A Construction Manager (CM) is retained by the Owner during the early phase of the design and works in a collaborative partnership arrangement with the Owner and Design Consultant. With the early involvement of the Construction Manager, this project delivery approach provides an opportunity to realize savings from the contractor's input in constructability, assessment of availability of materials early in the project, timely pricing and procurement, minimizing project timelines, and appropriate assignment of risk between the parties.

The use of the Construction Management approach was recommended by UWSS management based on issues that were noted during the preliminary design of the proposed reservoir by Associated Engineering (AE). Based on the UWSS Inc. Infrastructure Review that was completed in early 2023, a 40 megalitre (ML) reservoir was proposed at the Ruthven Water Treatment Plant. However, the results of AE's preliminary design of Reservoir #3 indicated that the subsurface soil conditions and extensive construction dewatering that would be needed in parts of proposed reservoir layout would result in construction costs of well over \$75 million. Further, routing water from the plant

Re: UWSS/05/25 - Approvals for Reservoir #3 Construction

to the new reservoir was identified as a challenge due to all the buried infrastructure on the property. These complexities warranted the use of a more flexible and innovative project delivery approach such as CMA/CMAR.

A review workshop between the UWSS and AE project team was held in December 2023 to review and identify any efficiencies (e.g. cost and financing, effort and scheduling) that may be achieved through combining projects and/or adjusting timelines for proposed upcoming capital projects including DAF#2, reservoir expansion, UV disinfection upgrades, high lift station upgrades and treatment capacity expansion.

A Request for Proposal (RFP) for retaining a Construction Manager Advisor and Construction Manager at Risk (CMA/CMAR) for the Reservoir Expansion/UV Disinfection Project was issued on MERX on February 2nd, 2024. The services identified in the RFP included Preconstruction Services for the addition of a new reservoir, Dissolved Air Flotation (DAF) retrofit, and High Lift Pump Station (HLPS) retrofit at the Ruthven Water Treatment Plant.

The RFP also indicated that the successful Proponent could also be eligible, at the discretion of the Union Water Supply System, to negotiate to enter into an agreement for one or more of the following works:

- Contract 2 - Early Works as a Construction Manager at Risk (CMAR)/ GC
- Contract 3 - Reservoir Construction as CMAR/ General Contractor (GC)
- Contract 4 - DAF and HLPS Construction as CMAR/ GC
- Contract 5 - UV Disinfection Preconstruction Service as CMA
- Contract 6 - UV Disinfection Early Works as CMAR/ GC
- Contract 7 - UV Disinfection Construction as CMAR/GC
- Contract 8 - Additional Plant Capacity Preconstruction Services as CMA
- Contract 9 - Additional Plant Capacity Early Works as CMAR/GC
- Contract 10 - Additional Plant Capacity Construction as CMAR/ GC

The RFP process was issued using a “two-envelope” process; one for the technical proposal and one for the pricing.

Based on the UWSS-AE review team evaluation of received proposals, UWSS Inc. awarded the CMA/CMAR Contract #1 to the Alberici Constructors Limited (ACL) on April 29, 2024.

Discussion:

UWSS Inc. management has been working closely with the Associated Engineering and Alberici Constructors since May 2024 regarding the reservoir #3 project. Design for the 10% design, 30% design and 60% design workshops were held in June 2024, November 2024 and February 2025 respectively. These workshops included participants for UWSS Inc, AE, ACL and OCWA. Construction cost estimates (Class D, Class C and Class B estimates) were prepared based on each design stage.

Re: UWSS/05/25 - Approvals for Reservoir #3 Construction

As part of ACL's involvement in the design stage, and OCWA operations staff involvement in the workshops, significant changes to the preliminary reservoir design were brought forth including the following:

- Reducing the size of the reservoir from 40 megalitres to 30 megalitres and partial burial of the reservoir instead of full burial. These changes will mitigate much of the dewatering concerns identified during the initial design and will require less concrete than a fully below grade reservoir, thus achieving significant cost savings.
- Inclusion of a new lift station. The lift station is needed to ensure that treated water from the plant can fill the reservoirs. The lift station will also house future pumps associated with the proposed new filtration building.
- Additional work to Reservoir #2 to ensure proper flow of treated water from the treatment plant to the reservoirs and then high lift station.

Since the reservoir design has progressed beyond the 60% design stage and progressing well to the 95% stage, ACL is seeking to take on the General Contractor role for the Reservoir #3 and lift station construction. ACL has provided construction pricing in the form of a Class B Guaranteed Maximum construction Price (GMP) of **\$54,459,118** based on the 60% reservoir design. The project team is currently working on the 95% design, which is anticipated to be completed in late May 2025. ACL will prepare a Class A GMP based on the 95% design. It is noted that Class A pricing is expected to be lower than Class B pricing.

ACL is proposing that the excavation works start as soon as possible and has provided an Early Works Package (EWP) GMP for this work. The EWP includes excavation works and associated dewatering system installation, concrete form work and caisson work. ACL's EWP GMP is valued at **\$14,584,061** (excluding HST) with ACL as the General Contractor and with AMICO and Roberts On-Site as Trade Partners.

With the assistance of AE, UWSS Inc. has retained a 3rd party firm, Rider Levett Bucknall Ltd (RLB) to review ACL's Class B pricing and EWP proposal to ensure that it is fair and in line with current market pricing for such works. The AE project team has reviewed RLB's evaluation and has noted the following in correspondence dated March 20th, 2025:

- RLB found that overall, the GMP submitted by ACL is acceptable and markups included in the pricing were reasonable. RLB raised a concern with the additional dewatering contingency amount suggested by ACL to be carried as part of their EWP scope of work. ACL included an additional \$1,000,000 dewatering contingency on top of the base scope dewatering cost of \$1,200,000 carried by AMICO. Consequently, RLB recommends that the EWP GMP be revised to **\$13,452,905** (excluding HST).
- AE recommends the award of an Early Works Package contract to ACL for **\$13,452,905** (excluding HST) based on a revised GMP as noted in RLB's peer review.

Re: UWSS/05/25 - Approvals for Reservoir #3 Construction

- AE recommends that UWSS retains an additional owner-controlled provisional dewatering allowance outside of the GMP of \$1,000,000. This contingency amount will be only drawn upon (at cost plus a fee) if the dewatering requirements are above and beyond what is currently carried as a base amount in the GMP.

It should be noted that under the existing Construction Management Contract with ACL, UWSS Inc. has no obligation to accept ACL's GMP for these works. UWSS Inc. can chose to reject ALC's GMP and proceed to tendering once the 95% design package is completed.

However, UWSS Inc. Management recommends that ACL be retained to implement the EWP construction works associated with reservoir #3 and lift station based on the following reasons:

- ACL was retained for Construction Management services under a competitive process.
- ACL is a highly experienced construction firm with numerous completed water treatment and water storage related projects.
- ACL has been thoroughly involved in the design process for these works, which has resulted in positive design changes resulting in significant cost reductions for this project.
- ACL is currently the general contractor for the Ruthven Water Treatment Plant (RWTP) DAF #2 project and thus is very familiar with the RWTP site. ACL has developed a good working relationship with OCWA operations staff at the RWTP.
- The construction cost proposals provided by ACL for Class B GMP and EWP have been evaluated by a third party and found to be fair and in line with current market pricing.
- Retaining ACL through the Construction Management Contract process will enable the excavation works to begin and critical equipment/materials to be purchased before full design is completed. This will help reduce uncertainty with material costs, shorten any supply chain delay issues and reduce the time needed to complete the project.
- The Construction Management Contract allows for separate contracts to complete the works, which provides "off ramps". As such, UWSS Inc. can choose to move forward with ACL for the EWP but is not bound by the GMP unless UWSS Inc. contracts with ACL for that purpose.

Re: UWSS/05/25 - Approvals for Reservoir #3 Construction

Financial Impact

UWSS Inc. has secured \$60 million in financing to support these works. UWSS Inc. can draw on these funds as needed during the construction process. The project will not impact existing UWSS Inc. operational and reserve funds. The project completion date is September 2026.

Closing Comments:

UWSS Inc. Management recommends that the UWSS Inc. Board of Directors move forward with the Reservoir #3 Early Works Package

Respectfully submitted,



Rodney Bouchard, CEO
Union Water Supply System Inc.

/kmj

To: UWSS Inc. Board of Directors
From: Rodney Bouchard, UWSS Inc. CEO
Date: March 19, 2025
Re: De-chlorination System Construction Budget Approval



Recommendation:

That the Union Water Supply System Inc. Board of Directors (Board) approves the sole-sourcing of the de-chlorination system construction to Alberici Constructors Limited in the amount of \$668,714, not inclusive of contingency and HST.

Further, that the Board approves a budget of \$800,000 to be funded by reallocation of funds from Board approved 2025 capital projects

Background:

As part of the Municipal Drinking Water License (MDWL) regulatory requirements for the Union Water Supply System, samples are collected from the residuals settling ponds/lagoons effluent for analysis of chlorine residuals. This sampling was made a requirement by the Ministry of Environment Conservation and Parks (MECP) in 2019 and UWSS operations staff started reporting the results to the MECP in 2020.

Due to the extremely low regulatory limit of 0.02 parts per million for chlorine effluent discharge to the environment, the samples collected from residuals pond effluent exceeded the limit. It should be noted that, as a drinking water treatment system, UWSS uses a significant amount of chlorine to disinfect the water. Thus, the exceedance was not surprising.

In October 2021, operations staff installed an online chlorine analyzer to improve the sampling and reporting process.

A non-compliance was noted for the first time in the 2021 MECP annual Inspection Report for the UWSS that the average annual lagoon effluent chlorine residual exceeded the annual average concentration limit for the UWSS' Municipal Drinking Water License. A passive de-chlorination system using "pucks" was installed at that time to address the chlorine residual issue.

However, OCWA operations staff noted that results for samples collected in 2022 and 2023 showed on-going exceedances, which highlighted that the passive de-chlorination system was not able to address the chlorine residual effluent issue. These chlorine residual exceedances were identified in the 2022 and 2023 MECP Annual Inspection Reports for the UWSS.

Re: UWSS/06/25 - De-Chlorination System Construction Budget Approval

Discussion:

In February 2024, UWSS Inc. management retained Associated Engineering (AE) to design an active de-chlorination system to address the issue.

Workshop meetings were held between AE, UWSS and OCWA operations to design a system and select the de-chlorination chemical that would be best suited to the UWSS treatment process from the perspectives of operations & maintenance and cost while ensuring system effectiveness.

The de-chlorination system is designed to be installed in the unused portion of the former Ammonia/Chloramination Building, thus mitigating the need to construct a building to house the system.

The system design is complete and UWSS Inc. Management hopes to move to the construction phase quickly. During the January-February 2025 MECP Annual Inspection of the UWSS, the MECP inspector noted that the de-chlorination system needed to be in place soon to avoid any potential penalties with the on-going non-compliance associated with the discharge of chlorinated effluent to the environment.

Since Alberici Constructors Limited (ACL) is already engaged by UWSS Inc. for the DAF#2 construction project, UWSS Inc. Management proposes to sole source the construction of the de-chlorination system to ACL. The sole sourcing to ACL would avoid the issue of having multiple contractors working for UWSS Inc. at the same site, which would result in UWSS Inc. become the General Contractor for both projects. Further, UWSS Inc. could retain ACL under the existing Construction Management Contract with ACL.

On behalf of UWSS Inc., AE has solicited a proposal from ACL for the construction of the de-chlorination system as per the AE design. ACL's cost estimate, not including contingencies and HST is valued at \$668,714.

Financial Impact

Based on ACL's construction cost estimate of \$668,714 (not including contingencies and HST), UWSS Inc. Management proposes a budget of \$800,000 for this work. The upset amount above ACL's price includes a contingency of 15% and a budget for 3rd party contractor oversight and inspection services.

The 2025 approved UWSS Inc. capital budget does not include a line item for construction of the de-chlorination system. UWSS Inc. Management proposes to re-allocate funds from the following approved capital projects to fund this work.

Item	Approved Budget	Proposed Reallocation
Carbon Scrubber System	\$125,000	\$125,000
Backup Power System Upgrades	\$2,000,000	\$350,000
Treatment Plant Façade Upgrades and Elevator	\$1,500,000	\$325,000

Re: UWSS/06/25 - De-Chlorination System Construction Budget Approval

Since the de-chlorination system construction works is proposed to be funded by the reallocation of funds from existing approved projects, no additional funds would be needed from UWSS Inc. reserves.

Closing Comments:

UWSS Inc. Management recommends that the UWSS Inc. Board of Directors approves the sole-sourcing of the de-chlorination system construction to ACL and approves a budget of \$800,000, to be funded by reallocation of funds from 2025 approved capital projects.

Respectfully submitted,



Rodney Bouchard, CEO
Union Water Supply System Inc.

/kmj