



**JOINT BOARD OF
MANAGEMENT**
Wednesday, October 18, 2023
9:00 AM
Kingsville Arena,
1741 Jasperson Ave.

AGENDA

- A. Call to Order:**
- B. Disclosures of Pecuniary Interest:**
- C. Approval of Minutes:**
Minutes of the meeting of the Union Water Supply System Joint Board of Management Meeting held Wednesday, September 20, 2023
Pages 3 - 8
- D. Business Arising Out of the Minutes**
- E. Items for Consideration:**
 - 1. UW/21/23 dated October 13, 2023, 2023 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from September 15th to October 13th, 2023
Pages 9 - 12
- F. Special Closed Meeting of the UWSS Joint Board of Management**

Recommendation:

That the That the UWSS Joint Board of Management move into a Special Closed Meeting, pursuant to the Municipal Act Section 239 (2)(f) for the following reason:

Matters for Consideration:

Legal discussion Under Municipal Act Section 239 (2)(f) update regarding advice provided by the solicitor for the Union Water Supply System Joint Board of Management.

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- G. Disclosure of Pecuniary Interest and General Natural Thereof
 - H. Adjournment of Special Closed Meeting
 - I. Report on Closed Session
 - J. New Business:
 - K. Adjournment:
 - L. Date of Next Meeting: November 15, 2023, Kingsville Arena

/kmj



JOINT BOARD OF MANAGEMENT

Wednesday, September 20, 2023
Kingsville Arena,
1741 Jasperson Ave, Kingsville
9:00 am

MINUTES

Members Present Mayor MacDonald (Chair); Deputy Mayor Verbeke, Councillors
Union Water Abraham, Dunn, Tiessen, Wilkinson - Leamington
Supply System Mayor Rogers, Gaffan, Neufeld (alternate) Patterson - Kingsville
Mayor Bondy - Essex
Deputy Mayor Walstedt - Lakeshore

Members Absent Deputy Mayor DeYong (Vice Chair),

Also in Attendance: Rodney Bouchard, Union Water Supply System Manager
For UWSS Kristine Johnson, Recording Secretary

Municipal Staff Kevin Girard - Town of Essex
Present: Shannon Belleau - Municipality of Leamington
Garry Punt - Municipality of Lakeshore

OCWA Staff Dale Dillen, Sandra Reaume
Present:

Call to Order: 9:02 am

Disclosure of Pecuniary Interest: none

Adoption of Board Minutes:

No. UW-37-23

Moved by: Councillor Wilkinson

Seconded by: Mayor Rogers

That the minutes of the Union Water Supply System Joint Board of Management meeting held on July 19 is received; and

Carried

Business Arising out of Minutes:

There was none.

Report UW/20/23 dated September 15, 2023 re: Operations & Maintenance Activities and Capital Works from July 19th to September 15th, 2023

The Chair notes that this will be a lengthy report as it has been since July since the last board meeting.

The Manager explains that he will move as quickly as possible to get through lengthy report. Nevro Pumps were on site for several items: Cottam Booster Pump #4 and High Lift Pump #6. The manager notes that pump #4 is now out for repairs and not needed at the moment, but pump #6 should be re-installed later this week and operators are glad, as this pump is quite often. Kent Compressor attended on site replace compressor #1, this also encompassed improvements to the entire compressor system.

The Kingsville Water Tower (KWT) has had its two (2) year warranty inspection, for improvements completed in 2020. A report has been prepared by the coatings company and reviewed. There were several suggestions for touch ups, which will be scheduled for low flow season as the tank needs to be drained. At that time a new corrosion control will be put in place.

The Manager then discusses the boil water advisory (BWA) of August 24th, 2023. He explains that because of the large storm, communication was lost to the tower. The operator was informed by residents around 4 am of low pressure, at which time staff was dispatched to switch to hydraulic mode. The BWA was called due to low pressure, below 20 psi, this was done in conjunction with the Town of Kingsville and the Windsor Essex County Health Unit (WECHU) as a precautionary BWA, not due to contamination. After water test results came back negative, the BWA was called off on August 25th, 2023.

Then a very long discussion and question period took place regarding the storm event that took place over August 23-25, 2023.

Mayor Bondy asks for clarification on the low pressure and why that triggered the BWA. The manager and operations manager explains that 20 psi is the minimum pressure that needs to be maintained throughout the water system and during the storm event operations staff did not maintain that regulated 20 psi pressure.

The Manager explains that operations staff recorded the volume in the KWT at 11 pm, then lost communications, and the plan was to send staff out at 5 am. He further notes that UWSS needs to maintain a minimum of 20 psi. However, calls came in around 4 am indicating low pressure, staff was then dispatched at that time. This caused some concern for staff as the tower had been full, there was concern as to where all the water went. At first it was thought there was a watermain break somewhere, and how do you find a watermain break, after 9 inches of rain and flooding?

As the investigation moved forward and more calls came in from residents, it was determined that with no hydro power, residential water back up sump pumps kicked on, likely contributing to the large loss of water from the KWT. The Manager explains that the water back up pumps require a large amount of water to create suction, therefore, clean

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drinking water was lost that night during this event. When there is no pressure this type of back up sump pump cannot work properly.

He further notes that operational staff had a difficult time filling the KWT after this event. However, now during any type of storm event staff will be dispatched immediately and have amended their protocols.

There is a discussion if perhaps battery back up sump pumps should be recommended, and some board members even recommended generators for residential back up. He notes that UWSS cannot guarantee the needed pressures to ensure that water back up sump pumps will work for residents. Things do happen such as watermain breaks, power failures, pressure problems and other issues could happen. UWSS does its best to prepare for any emergency, but with such an epic storm no one could have known this would happen.

The operations manager added that typically the KWT would last for 12 hours, at the volume it was at 11 pm. The KWT drained in four (4) hours. He explains some other technical items surrounding the operational side and what operational staff do during events such as this.

Mayor Rogers asks that the standard operating procedure (SOP) is adjusted to include contact with the Fire Department when low pressure events occur. The Operations Manager indicates that contact does happen after certain triggers are met.

Mayor Rogers asks for clarification regarding the communications systems between KWT and the Ruthven WTP. The Operations Manager explains that point to point radio contact is used and relatively no issues with this system have occurred, and it is fairly new system.

Mayor Rogers asks for clarification on water back up sump pumps. The Manager indicates that these systems waste too much clean drinking water and risk cross contamination for our system. He would discourage them in the future.

Councillor Abraham asks if the radio point to point contact could be hard lined to allow for better communication. The Manager reminds members that not every piece of equipment can be hard lined, as the costs would be excessive and the communication system is relatively new with no issues.

Other board members expressed their opinions on back ups and recommendations were for residents to consider generators.

Councillor Wilkinson asks about Leamington Water Tower (LWT) during this event and why nothing happened to it during this storm. The Operations Manager explains that the LWT runs differently than the KWT as it has a direct line connection to the system and briefly explains how the pressure system works.

The Manager reminds the members of the board that the Ruthven WTP is staffed 24 hours a day and 365 days a year, staff also have back up power and generators at the plant.

Councillor Gaffan informs members of the board that the recommendations for water back up sump pumps comes from many insurance companies. The Manager indicates that

insurance companies have never reached out to UWSS either to discuss whether it is possible for the water treatment systems to keep up.

There is a brief discussion on messaging to get out to residents and that it should be the same for all four municipalities.

The Manager then continues with his report noting that the storm washed away the road to the Low Lift. That has been repaired by DiMenna Excavating.

The DAF warranty operation inspection has been completed. The DAF will be taken out of service for cleaning and further warranty inspection once low flow season begins. He further notes that the new media has been installed and is working well.

The High Lift pump #4 soft start is failing, a new part has been ordered, along with a new valve and actuator for Clarifier #3.

The Manager explains that C3 Water is making progress on several projects including the AWT capacity issues, including some testing, more aggressive testing will take place in later October, once demands are lower. Secondly, C3 Water and Stantec Consulting are making progress on the emergency redundancy water supply between UWSS and Windsor Utilities Commission (WUC). An update will be provided to the board one the final Technical Memorandum is issued.

Here the Manager notes that UWSS has opened the interconnects to the Wheatley area to assist them after the fire at the Wheatley Water Treatment Plant. That is why the above-mentioned project is so important to UWSS.

The Manager continues his updates on other projects. Associated Engineering (AE) is moving forward and should have the design completed by the end of the year. The Request for Project Construction Manager has been released.

He reminds members that Stantec Consulting has been hired to design and undertake engineering and project management services for the updates to the HL pumping system and the new HL Pump #7. He notes that the budget for this project was approved for 2023 of \$300,000. He also notes that Stantec is providing engineering services back up power generation.

The billing meter chamber pilot project is underway, with four (4) currently being looked at. UWSS will be working with C3 Water on this project, and it will extend into the Spring of 2024. While Summa Engineering will be undertaking the upgrades to the Filter PLC panels. Installation of the new panels should take place in November of 2023.

The Manager indicates that the new phone system will be provide by JDC and this team is also working to provide new redundant internet connections for the UWSS facilities as well.

The Manager indicates that Eramosa Engineering will be installing a data integration system with eRIS software. This system will allow for real time data for operations as well as the municipal partners.

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The Manager explains that the UWSS Municipal Class Environmental Assessment Study for peaking capacity for the water system is one schedule. He notes that there will be open houses scheduled soon and a report coming over the winter.

The Manager also notes that AE Advisory Services has been retained to provide Asset Management Strategy and Policy for the UWSS. He is hoping that this is ready for December for review.

Finally, the Manager notes that the flows this year have fallen off and are at a similar level to the 2022. This changes the budget slightly.

There is a small discussion on providing water to Wheatley. The Manager notes that UWSS is not capable of servicing the customers on the Leamington side. We can only provide some residual relief. This discussion then focuses on any possible emergency with UWSS and what would happen.

Another discussion is starts regarding the residential growth within the UWSS and if there is concern about that. Shannon Belleau suggests that the water working group meet again to discuss residential growth and other potential impacts on the water system.

No. UW-38-23

Moved by: Deputy Mayor Verbeke

Seconded by: Councillor Dunn

That report UW/20/23 dated September 15, 2023 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from July 19th to September 15th, 2023 is received.

Carried (UW/20/23)

Presentation: UWSS 2023 Mid-Year Financial and Expenditure Update

The Manager provides the members of the board with a financial update. He notes that the demand flows have dropped off a bit at this point, which is affecting the budget slightly. He further notes that even though the flows have trended a bit down in this second half of the year, the sundry revenue is up slightly. Also, some of the planned capital works are not happening at this time.

He then moves through the budget noting that the lease agreement with the tenant has changed as they are now only renting the house and shop, and no longer using the greenhouse, as this is planned to be taken down to make room for the reservoir.

The budget for the UWSS-WUC study shows high at the moment, but ½ of those monies will be recovered from WUC at the end of the year. The budget for the OCWA contract has increased, due to chemical costs increase, which there is no control over, as well as some staffing changes.

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He then reviews multiple aspects of the budget so members can see where any changes have been made. He notes that less funds will be removed from reserves than originally anticipated due to changes in capital works and the better interest rates received on the investment income.

The Manager mentions several items that have changed from the original budget including a new travelling screen #4, the administrative building renovations will now be reevaluated as the renovation costs came in too high to justify. Also two (2) new budget items include a water buggy and a new work vehicle for UWSS Inc.

No. UW-39-23

Moved by: Councillor Patterson

Seconded by: Councillor Tiessen

That the presentation regarding the UWSS 2023 Mid-Year Financial and Expenditure update is received; And

That the changes presented for the 2023 UWSS Budget is approved.

Carried

New Business:

There was no new business.

Adjournment:

No. UW-40-23

Moved by: Councillor Dunn

Seconded by: Councillor Abraham

Time adjourned: 10:42 am

Date of Next Meeting: October 18, 2023 - Kingsville Arena, 9 am.

/kmj

To: Chair and Members of the Union Water Supply System Joint Board of Management

From: Rodney Bouchard, UWSS General Manager

Date: October 13, 2023

Re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from September 15 to October 13, 2023



Aim:

To inform the UWSS Board about operational and maintenance activities and capital works projects for the Union Water Supply System since the last Board meeting on September 20, 2023.

Discussion:

The UWSS General Manager conducts regular meeting with OCWA Operations staff in regards to on-going operations and maintenance programs for the UWSS facilities. The following provides an update on UWSS operations, regular maintenance and major maintenance and Capital Works at UWSS facilities:

1. Nevro was on site on July 14, 2023 to remove the motor from High Lift pump #6. Previous vibration analysis conducted in June 2023 indicated that a motor bearing needs to be replaced. The repairs have been completed and the motor was installed on September 22nd. Pump #6 has been returned to service.
2. On August 14th, 2023, a 2-year warranty inspection was completed for the Kingsville water tower coating improvements that were done in 2020. The inspection was completed by P.W. Makar Coatings Inspection Ltd. An inspection report dated August 16, 2023 was prepared by the coatings inspector. The inspection report indicates that some interior and exterior paint touch ups are required to ensure the integrity of the coating system. The exterior coating deficiencies were addressed on October 5th and 6th. The interior deficiencies were considered minor by the project engineer and not significant enough to warrant draining and taking the tank out of service. PW Makar was on site on October 7th, 2023 to inspect the repairs and indicated that, in general, the condition of the tank both interior and exterior, is considered good and with periodic inspection, cleaning and touch ups (if required) the coating life would likely extend to another 15 years or more.
3. On October 10th, 2023, operations staff noted that one of the 2 compressors on the DAF system was not working properly. Upon inspection, maintenance staff identified that a compressor motor had failed. This item is under warranty and the part has been ordered. A second "spare" motor was also ordered so that downtime is minimized in the future. The DAF system is still in operation.

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4. High Lift pump #2 was noted with high vibration on October 11th, 2023. The pump was taken out of service and is scheduled for inspection by outside contractor the week of October 16th, 2023.
5. High Lift pump #5 check valve failed on October 12th, 2023. This is an older style check valve that is no longer available. A new check valve will require modifications to the assembly. It is anticipated that this pump will be out of service until late November or early December 2023.
6. OCWA Union maintenance staff noted that the soft start for High Lift pump #4 is failing. A new soft start has been ordered but due to supply and shipping delays, this repair will not be completed until early November 2023.
7. A new valve and actuator for Clarifier #3 was ordered and received. This valve has been inoperative since May 2023 and Clarifier #3 has been operating without automated flow control. The installation of this valve requires draining of the clarifier. This work is scheduled for the week of October 23rd, 2023.
8. C3 Water Inc. is making forward progress on the project to address the operational capacity and filling issues with the Albuna Water tower. The Phase 3 portion of the field-testing work is still on-going. Five pressure monitors were deployed on October 13th, 2023, for this phase of testing.
9. Associated Engineering (AE) is making forward progress on the conceptual and indicative design for the new proposed reservoir at the UWSS owned property adjacent the water treatment plant. AE issued technical memorandum TM 03 - New Reservoir and UV Facility - Structural and Architectural Approach on October 4th, 2023 and has been reviewed by UWSS. AE is moving forward with the process for retaining the Construction Manager for this project and is also working on a demolition specification for the removal of the greenhouse infrastructure.
10. UWSS has retained Stantec Consulting (Windsor office) to undertake design, engineering, project management services for upgrades to the Water Treatment Plant High Lift Pumping system to include a new High Lift Pump (HL#7) in the north clearwell. Equipment supply and Contractor selection is on-going through a competitive process and is expected to be completed in late November 2023.
11. UWSS has retained Stantec Consulting to undertake evaluation, design, engineering and project management services for a new backup power generating system for the UWSS treatment plant and low lift plant. This work is on-going with engineering/design scheduled for completion in late winter 2024.
12. UWSS has retained C3 Water to undertake a pilot project for upgrades to billing meter chambers. This work will include full design, engineering, and project

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- management for rehabilitation of 4 billing meter chambers. The engineering design work for this project is on-going and will extend into Spring 2024.
13. Summa Engineering (McRae Integration) has been retained to undertake upgrades to Filter PLC Panels 1 & 2. Construction of the panels are basically complete. Factory Acceptance Testing (FAT) for the new panels is scheduled for November 9th, 2023. Installation and Integration of the new panels within the SCADA system will likely occur in late November 2023.
 14. UWSS has retained JDC.ca Inc. to provide and install a new telephone system for the UWSS building facilities. JDC was selected as the preferred option from four proponents. JDC was on site on October 11th, 2023 to install the ethernet cabling for the new system. This project is scheduled to be completed by the beginning of November 2023.
 15. UWSS has retained Eramosa Engineering to install a data integration system at UWSS. This will include installation of the eRIS software platform that will integrate all the data that is received from the smart hydrant meters, data that will be received from the new instrumentation within billing meter chambers, water quality data from SCADA, etc. Deployment of this system is on-going and is anticipated to be completed in November 2023.
 16. The UWSS Municipal Class Environmental Assessment Study to Provide Peaking Capacity for the Union Water Supply System” is proceeding on schedule. AE and UWSS reviewed the preliminary draft EA report on October 11th, 2023. A public consultation open house has been tentatively scheduled for November 18th, 2023 at the Unico hall in Kingsville. A second public open house will be held in late January 2023. It is anticipated that the EA report will be completed in February 2024.
 17. Associated Strategic Advisory Services, a division of Associated Engineering (Associated) has been retained to develop an Asset Management Strategy and Policy for UWSS and to prepare an Asset Management Plan. This work is on-going and a meeting is tentatively scheduled for October 30th, 2023 to review preliminary results of the asset management strategy and asset management plan work.
 18. OCWA maintenance staff have installed smoke/fire alarms in both generator rooms at the treatment plant and will install alarms at the low lift and Cottam Booster Station as well.
 19. UWSS continues to supply water to the Wheatley drinking water system due to the Wheatley water treatment plant shut down that resulted from a fire at this plant. This will likely continue until the Wheatley water treatment plant is back in operation, which could be Summer 2024 or later.
 20. The interconnects between the UWSS and Harrow-Colchester drinking water system were opened on October 10th, 2023. The Colchester water treatment

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was shut down for necessary work on their clarifier. This work is scheduled to be completed by October 16th, 2023, and the interconnects will be closed at that time.

21. OCWA maintenance staff have installed a new radar level transmitter on the Kingsville Tower on October 11th, 2023. This will provide more accurate water level information in the Kingsville Water Tower, than the previous pressure level transmitter. for a more accurate level indication.

22. UWSS and OCWA maintenance staff are in the process of procuring backup generators for installation at the water towers. Once in place, these generators will ensure that back-up power is available for instrumentation, etc at the water towers during power outages.

The first chart shows comparative flows for 2019 through 2023 in Mega Litres (ML) and the second chart shows Millions of Imperial Gallons (MIG) for the period January 1st to September 14, 2023.

	2019	2020	2021	2022	2023
Flow to Date (ML)	14,192.57	16,091.27	16,804.55	17,526.70	17,646.32
Max Day (ML)	85.40	97.32	93.82	99.17	108.67
Min Day (ML)	20.12	25.44	26.73	27.57	32.47
Average Day (ML)	49.79	52.24	54.39	57.04	61.91
No of Days	285	286	285	285	285

	2019	2020	2021	2022	2023
Flow to Date (MG)	3121.99	3539.65	3697.88	3856.08	3881.71
Max Day (MGD)	18.79	21.41	20.64	21.82	23.91
Min Day (MGD)	4.43	5.60	5.88	6.07	7.14
Average Day (MGD)	10.96	12.38	12.96	13.53	13.62
No of Days	285	286	285	285	285

Flows to date are up 115 ML (25.63 MIG) or 0.6% from last year. The 2023 flows to date are up 9.2% over the previous 4-year average.

Recommendation:

That this report be received by the UWSS Board for information purposes.

Respectfully submitted,



Rodney Bouchard, General Manager
Union Water Supply System Joint Board of Management

/kmj