



JOINT BOARD OF MANAGEMENT

Tuesday, January 17, 2023

6:00 pm

County Council Chambers
360 Fairview Ave W, Essex

AGENDA

A. Call to Order:

B. Election of Chair and Vice Chair of the UWSS Joint Board of Management

UW/01/23 - 2023 Election of the UWSS Joint Board of Management Chair and Vice Chair dated January 12, 2023
Pages 3 - 6

C. Disclosures of Pecuniary Interest:

D. Approval of Minutes:

Minutes of the meeting of the Union Water Supply System Joint Board of Management Meeting held Wednesday, Wednesday, October 19, 2022
Pages 7 - 10

E. Business Arising Out of the Minutes

F. Items for Consideration:

1. UW/02/23 dated, January 12, 2022 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from October 19, to January 12, 2023
Pages 11 - 15
2. UW/03/23 dated January 12, 2022 re: Draft 2023 UWSS Operations and Capital Budget Report - For Information
Pages - Report 16 - 26
Pages - Tables 27 - 31
Pages - 10 Year 32 - 35
3. UW/04/23 dated January 12, 2023 re: UWSS Representative on the Essex Region Source Water Protection Committee
Pages 36 - 38
4. Dates for the Union Water Supply System Joint Board of Management 2023
Page 39

G. Special Closed Meeting of the UWSS Joint Board of Management

Recommendation:

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

Matters for Consideration:

Verbal update Under Municipal Act Section 239 (2)(e)(f) update regarding potential litigation and advice provided by the solicitor for the Union Water Supply System Joint Board of Management.

The UWSS Board consider this verbal report in closed session pursuant to section 239(2) of the Municipal Act, 2001, subsection(s)(e)(f):

H. Disclosure of Pecuniary Interest and General Nature Thereof

I. Adjournment of Special Closed Meeting

J. Report on Closed Session

K. New Business:

L. Adjournment:

M. Date of Next Meeting: February 15th, 2023, 1741 Jasperson Lane, Kingsville Arena, 9:00 am

/kmj

UW/01/23

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

FROM: Rodney Bouchard, Union Water Manager

DATE: January 12, 2023

RE: Procedure for the Election of the UWSS Chair and Vice Chair



AIM:

To inform the Board of the procedure for the election of a Chair and Vice-Chair of the Board for a term ending December 31, 2023.

BACKGROUND

The Transfer Order which established the Joint Board of Management of the Union Water Supply System sets out certain rules for the Board. The following are among the items specified in the Transfer Order regarding the Chair and Vice-Chair:

- That the Board members are appointed by the municipalities for a term of one (1) year.
- That there is to be a Chair and Vice-Chair elected from amongst the members of the Board.
- That the Chair and Vice-Chair must be from different municipalities.
- That the Chair and Vice-Chair are elected for a (1) of one year.

DISCUSSION:

Functions of a Chair and Vice-Chair

The Chair and Vice-Chair are positions that are prescribed in the UWSS Transfer Order. The Chair is responsible for the following duties under the Transfer Order:

1. Chairing of meetings of the Joint Board of Management.
2. Calling meetings of the Joint Board of Management.
3. Executing agreements and conveyances entered into by the Joint Board of Management. The Chair co-signs with another member of the Board.

The Vice-Chair is designated under the Transfer Order to act as Chair in the absence of the Chair.

In addition to the functions that are set out in the Transfer Order, the Chair and Vice-Chair undertake the following tasks which have been determined by the Board over the 20 years of its existence.

1. The Chair and Vice-Chair have signing authority on the UWSS bank accounts along with the UWSS Manager and the Leamington Director of Finance. Account transfers require two (2) signatures, one (1) of the Chair or Vice-Chair and one (1) of the Manager or the Finance Director.
2. The Chair and Vice-Chair meet once a month with the Manager to review the proposed agenda for the next Board meeting.
3. The Chair and Vice-Chair conduct an annual performance appraisal of the Manager.

Under the Transfer Order the Chair and Vice-Chair are elected for a one (1) year term and must be from different municipalities. These requirements are intended to ensure that the Board acts in the overall system's interest and in the interest of all of the municipal owners. In some of the other Joint Boards of Management set up under the same legislation, the position of Chair is required to rotate annually or biannually among the municipal owners.

This memorandum is intended to allow the Board members to prepare for the election. Any questions regarding the procedure should be given to the Manager before the meeting if possible.

Election Procedure

The established procedure for the election of the Chair and Vice-Chair of the Joint Board of Management should be as follows:

The Manager will chair the meeting until the election of the new Chair.

The Manager will call the meeting to order.

The first order of business is the election of the Chair.

The Transfer Order under section 1 (g) says that the Chair and Vice-Chair may not be from the same municipality. This means that the election of the Chair must be completed before the Board can determine which members are eligible to be elected as Vice-Chair.

The Manager will ask for nominations from the Board for the position of Chair. Nominees must have a proposer and a seconder (neither of which can be the nominee) and the nominee will be asked if they are willing to accept the nomination. The list of candidates will be made up of those nominees who accept their nomination.

If there is only one (1) successful nomination, that candidate will be acclaimed as Chair.

If there are two (2) or more nominations, there will be an election. The Manager will state the names of the nominees in alphabetical order by surname. After each name is announced there will be a show of hands by those wishing to vote for that candidate. Board members shall only vote for one candidate. Candidates can vote for themselves.

The recording secretary will record the number of votes for each candidate. The nominee with the most votes will be declared to be the Chair for the term.

If there is a tie for the most votes cast, the name of each nominee who is tied will be written on a slip of paper by the Manager and the slips will be placed in a hat or box. The Administrative Assistant will draw one slip and the name on that slip will be declared as the new Chair.

The Manager will ask for a motion confirming the appointment of the successful candidate as Chair.

The new Chair will then take charge of the meeting.

The Chair will then proceed with the election of the Vice-Chair. If the Chair is from a municipality with more than one member on the Board, no Board member from that municipality is eligible to serve as Vice-Chair.

The Chair will ask for nominations from the Board for the post of Vice-Chair. Again, nominees must have a proposer and a seconder and the nominee will be asked if they are willing to accept the nomination. The list of candidates will be made up of those nominees who accept their nomination.

If there is only one (1) nomination, that candidate will be acclaimed as Vice-Chair.

If there are two (2) or more nominations, there will be an election by show of hands. The Chair will say the names of the nominees in alphabetical order by surname. After each name is announced there will be a show of hands by those wishing to cast a vote for that candidate. Board members shall only vote for one candidate. Candidates are allowed to vote for themselves.

The recording secretary will record the number of votes for each candidate. The candidate with the most votes will be declared to be the new Vice-Chair.

If there is a tie for the most votes cast, the name of each candidate who is tied will be written on a slip of paper by the Manager and the slips will be placed in a hat. The recording secretary will draw one slip and the name on that slip will be declared as the new Vice-Chair.

The Chair will ask for a motion confirming the appointment of the successful candidate as Vice-Chair.

January 12, 2023 - UW/01/23

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Re: Election for the 2023 Chair and Vice Chair for the UWSS

Immediately after the election of the Vice-Chair, the meeting will proceed with the rest of the business on the Agenda.

Respectfully submitted,



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



JOINT BOARD OF MANAGEMENT

Wednesday, October 19, 2022
9:00 am

MINUTES

Members Present Mayor MacDonald (Vice-chair); Deputy Mayor Verbeke, Councillors
Union Water Dunn, Hammond, Tiessen - Leamington
Supply System Deputy Mayor Queen, Councillor DeYong, Patterson - Kingsville
 Councillor VanderDoelen - Essex
 Councillor Walstedt - Lakeshore

Members absent Councillor Wilkinson - Leamington
 Alternate - Kingsville

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

Municipal Staff Rob Mackie - Town of Essex
Present: Shaun Martinho - Town of Kingsville
 Shannon Belleau - Municipality of Leamington

OCWA Staff Dale Dillen
Present:

Call to Order: 9:07 am

Disclosure of Pecuniary Interest: none

Adoption of Board Minutes:

No. UW-41-22

Moved by: Deputy Mayor Queen

Seconded by: Councillor Dunn

That the minutes of the Union Water Supply System Joint Board of Management meeting held on September 21, 2022 is received.

Carried

Business Arising out of Minutes:

There was none

Report UW/20/22 dated October 14, 2022 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works to October 14, 2022

The Manager explains that DiMenna Excavating was retained on October 11, 2022 to excavate Clarifier #3 and #4 effluent line that has been leaking, so a more permanent repair could be completed. He notes that the pipe was not installed properly, but that this line is important to be repaired as UWSS could potentially lose half of the plant should this line fail. It was considered an emergency repair.

SAI Global has now completed their on site DWQMS inspection. The OCWA compliance staff facilitated with that inspection. Only one (1) opportunity for improvement (OFI) was noted after the inspection was complete. The OFI was in regard to the work order system and that issue has since been addressed.

As previously mentioned the protective membrane in the clear well underneath the truck way was in poor condition. Also as noted Greenflag will be completing the necessary repairs, as materials arrived on site on October 13, 2022. Rehabilitation should be completed by the end of October.

The Factory Accepted Testing (FAT) has been completed for the new PLC and installation is scheduled for October 20, 2022. Site Accepted Testing (SAT) will also be completed as part of the installation work.

The Manager informs the members that interconnects had been opened between UWSS and Harrow Colchester for approximately one (1) week. This was to assist Harrow Colchester with a major repair to their clarifier influent pipe. Approximately 26,000 m3 was provided to them, and this water usage will be invoiced to the Town of Essex.

Ten (10) new smart hydrant monitoring devices have been installed throughout the UWSS system. This brings the total monitoring program to 34 devices. Ken Penney, OCWA Operations Manager, is responsible for this and notes that valuable information has been provided with the installation of this system. UWSS is working towards providing access to the municipalities so they may utilize data during any events they may experience.

The Manager notes that DiMenna Excavating has been retained for the removal of the residual pile and transfer it to the landfill. EWSWA has given UWSS a fair price for taking the residuals. The Manager notes that 5,000 tonnes have been removed and in Spring of 2023 another lagoon will be cleaned out.

The Manager provides an update on the DAF project. He notes that this project has basically been completed, with the exception of modifications to the skimmer arms. He anticipates by the end of October that those new arms should be in place. After substantial completion by the end of the month UWSS will move into the warranty phase of the project.

The Manager then reviews the flows and confirms that they are still up over last year and the last four (4) years.

Councillor Patterson asks the Manager if he has considered using a rating/scoring system for contractors and suggests that he reach out to Kingsville staff if he is interested in reviewing their program.

Deputy Mayor Verbeke asks whether the landfill pays UWSS to take the residual pile. The Manager explains at this time no, that is not the case, but he is still hoping to have the residual rated by the MECP to allow the material to be considered ground cover.

No. UW-42-22

Moved by: Deputy Mayor Verbeke

Seconded by: Councillor Dunn

That report UW/20/22 dated October 14, 2022 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works to October 14, 2022 is received.

Carried (UW/20/22)

Verbal Update on DAF Phase 1 - Clarifier No. 2 Project

The Manager reminds members of the board the reasons for implementing the DAF system upgrade. He reminds members of the studies conducted by Associated Engineering (AE) over the past several years, including a stress test of the three (3) clarifiers, after which a report was issued by AE wherein it was identified that DAF would be the best way to proceed with improving the clarification process.

The Manager reviews the stats of the clarifiers and how much water each can push through the system. It has now been identified that even though the DAF system is an improvement of the clarification process the actual WTP infrastructure limits how much more water can be pushed through the system.

The Manager also reminds board members that potentially in two (2) years Clarifier #4 will be retrofitted to the DAF system as well and this will also improve the clarification process.

He also notes that as he has previously mentioned the main bottleneck is the lack of water storage capacity and with the approval of Reservoir #3 this will improve this aspect of the water treatment process. He does note that the moratorium will most likely have to be extended.

Shannon Belleau of Leamington notes that even if UWSS improves storage capacity that is not going to assist with the capacity issues. The Manager notes that the extra storage will assist with the peaks that UWSS experiences during the high heat days. He also notes that UWSS is currently working on the Albuna Water Tower (AWT) capacity issues and hoping to resolve that issue.

The Manager notes that as part of the 2023 UWSS Budget, he will be proposing to undertake an Environmental Assessment for a new membrane package water treatment plant. He would hope that this membrane facility could be functioning within five (5) years. He notes that if the UWSS wants to accommodate more capacity the next logical step is a membrane facility.

Councillor DeYong asks if the UWSS could face legal issues regarding the moratorium. The Manager notes that the moratorium is only on new applications and he doesn't anticipate any issues as UWSS has been doing what has been recommended by experts in the industry.

The Manager then discusses the restructuring and notes that documents are in their final stages of preparation and he is hopeful that the new board will be ready to go sometime around March of 2023. He notes that there is a rate setting meeting scheduled for early November, which will set the rates for the next four (4) years.

There is a discussion regarding the infrastructure that could be required based on growth projections in both residential and the greenhouse industry. The Manager notes that there has been discussion of replacing some of the original watermain lines with larger size ones when the time comes in order to accommodate that growth.

Shaun Martinho from Kingsville asks whether the moratorium will affect residential growth in any way. The Manager notes that the moratorium is still only related to the large service applications, not residential. There is then a discussion on how many industries look for alternatives when they are faced with a roadblock, and in this case the greenhouse sector will look for alternatives to water, such as well, or raw water lines.

No. UW-43-22

Moved by: Councillor DeYong

Seconded by: Deputy Mayor Qeen

That the verbal report on the DAF and following discussion is received.

Carried

New Business: none

Adjournment:

No. UW-44-22

Moved by: Councillor Tiessen

Seconded by: Councillor Hammond

Date of Next Meeting: TBD

UW/02/23

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

From: Rodney Bouchard, UWSS General Manager

Date: January 12, 2023

Re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from October 19, 2022 to January 12, 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 October 19, 2022.

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. DiMenna Excavating was retained on October 11, 2022 to excavate Clarifier #3 and #4 effluent line so that a permanent repair can be completed on the pipe joint located where the effluent extends outside the treatment building. A temporary repair was completed in July to stem a significant leak from that joint. Utility Service Corp. was on-site on October 17, 2022 to assess the situation and identify the best permanent repair option. Utility Service Corp. identified a special type of clamp that could be used for a permanent repair on the leak. The work to repair the effluent pipe was started on December 15, 2022 by Utility Service Corp with assistance from DiMenna Excavating and OCWA Union maintenance staff. It is anticipated that this work will be completed the week of December 19th, 2022.
2. UWSS OWCA operations and maintenance staff identified that the protective membrane for the clear well underneath the truck way was in poor condition and needed to be rehabilitated to prevent any potential leakage of surface water into the clear well. Greenflag Coatings of Kingsville, ON has been retained to complete this work. Removal of the existing membrane and rehabilitation of the concrete was completed by Greenflag during the weeks of November 28th and December 5th. Significant repairs to the concrete surface were needed. As of the date of this report, Greenflag has installed two layers of the 3 layer coating system. The final layer is scheduled to be completed the week of December 19th, 2022.
3. Summa Engineering was retained to build a new PLC Panel for the Cottam Booster to replace the existing obsolete panel. Factory Acceptance Test (FAT) of the new PLC panel was completed in early October 2022. The new PLC panel was delivered and installed by Summa Engineering on October 17-18,

Re: UW/02/23 - Status Update of UWSS Operations & Maintenance Activities and Capital Works from October 19, 2022 to January 12, 2023

2022. Site Acceptance Testing (SAT) was completed following the installation and the new panel was put into service.

4. The 2022 Town of Kingsville distribution system inspection report issued by the Ministry of Environment, Conservation and Parks (MECP) was received on November 21st, 2022. The inspection report indicated a 100% inspection rating.
5. A backup chlorine analyzer was purchased and installed next to the existing analyzer that is used for determining plant CT calculation for regulatory disinfection compliance. This work was completed on November 23rd. This backup analyzer will ensure that regulatory compliance disinfection data is obtained should the primary analyzer fail or require service.
6. Clarifiers #3 and #4 were taken out of service during the week of November 28th for cleaning and inspection. Maintenance staff noted some broken welds on the Clarifier #4 mixer frame. OCWA Union maintenance staff are working on a plan to repair the mixer frame. Also, OCWA Union maintenance staff used the shut down to install a new blow off valve on Clarifier #4. This work was completed on December 7th.

It is anticipated that Clarifier #3 will be return to service at the beginning of February 2023 once water demand increases. Clarifier #4 will return to service in March 2023 to accommodate the typical water demand increases in the Spring.

7. OCWA Union maintenance staff noted that Filter #1 filter to waste valve was leaking. A new valve was purchased and installed on December 5th, 2022.
8. Cleaning of the Low Lift wells was completed during the week of December 5th. This cleaning is typically done in December when water demands are low and each of the 2 wells can be taken out of service one at a time. During the cleaning and inspection, it was noted that the travelling screen #3 had a worn sprocket. The travelling screens are used to remove zebra/quagga mussels and other debris from the raw water. An inspection of the travelling screen #3 was completed by Evoqua Water Technologies on December 14, 2022. An inspection report and recommended options for refurbishment and/or repairs will be provided in January 2023.
9. In late October 2022, OCWA Union operations staff noted that one of the two algae monitoring probes at the low lift had failed. Attempts to repair the probe by OCWA Union were not successful. The probe was removed on December 5th and sent to the supplier, Hoskins Scientific, for inspection and repair. It's anticipated that the probe will be reinstalled sometime in February 2023 so that it is operational before the April 2023 start of the algae monitoring season.
10. In October 2022, OCWA Union operations staff noted that Meter Chamber #17 flow meter had failed. A new flow meter was to be ordered. However, during discussions with Town of Kingsville staff in regards to the water main relocation

- work to be completed as part of the Hwy #3 expansion, it was decided that it would be best to remove meter chamber #17 and the associated flow meter. This meter is no longer used as a primary billing meter and thus is not needed. Also, the chamber would require substantial rehabilitation due to its poor condition. This work will be completed as part of the water main relocation work in Spring/Summer 2023.
11. The consultant team of C3 Water Inc. and Stantec Consulting has been retained to complete the conceptual design for an emergency water supply sharing solution between UWSS and Windsor Utilities Commission (WUC). This work was approved by both UWSS and WUC Boards at a joint board meeting in June 2022. The official kick-off meeting for this work occurred on November 3rd, 2022 although data review and modelling work was initiated prior. This conceptual design work builds upon a preliminary evaluation in 2021 by the consultant team that identified possible emergency water supply sharing solutions. A workshop between UWSS, Enwin (who manages WUC operations) and the consultant team was held on December 14 to evaluate preferred operational models for water sharing. A technical memorandum on this aspect of the work will be issued in January 2023. The next steps of the study will continue into Spring 2023. It's anticipated that a final conceptual design report will be issued in early Summer 2023.
 12. C3 Water Inc. has been retained to investigate and identify solutions to the existing Albuna Water tower filling and storage issues. This work was approved by the UWSS Board at the September 2022 UWSS Board meeting. Background data review and field inspections were completed in October. In late October 2022, temporary pressure monitoring devices were installed on hydrants in vicinity of the Albuna water to obtain water pressure readings and to identify pressure issues. These devices were removed at the end of November to avoid freezing temperatures and damage to hydrants. As part of this project, 3 new smart hydrant monitoring devices have been purchased to obtain pressure data in the Albuna Tower area during the winter months and during testing of Albuna Tower filling. These permanent devices were installed on January 10, 2023. It is anticipated that a technical report with preliminary findings and recommendations will be issued in February 2023.
 13. Associated Engineering (AE) has been retained to complete conceptual and indicative design for a new reservoir at the property adjacent the water treatment plant that was purchased by UWSS in 2021. This project also includes the evaluation and design for UV disinfection process at the Ruthven Water Treatment Plant. This work was approved by the UWSS Board at the September 2022 UWSS Board meeting. AE issued 3 draft technical memoranda on November 25th, 2022 on UV technology and location options, water treatment plant hydraulics, and green energy options for the reservoir. The UWSS General Manager reviewed these with AE project staff on November 30th. Two additional draft technical memoranda on reservoir sizing and location and preliminary will be issued in January-February 2023. Other work that are underway are the subsurface utility evaluation (SUE) at the

Re: UW/02/23 - Status Update of UWSS Operations & Maintenance Activities and Capital Works from October 19, 2022 to January 12, 2023

property. Geotechnical investigations will be completed in January 2023. Indicative design is anticipated to be completed by end of April 2023.

14. Associated Engineering was retained to complete a structural inspection of the water treatment plant building. This was undertaken due to concerns identified by plant staff in regards to large cracks identified in administration area and filter gallery of the water treatment plant. The inspection report recommended the installation of crack monitors at a number of location to monitor any movement or expansion of the cracks. Additional recommendations will be provided based on the 6-month monitoring period results. The crack monitors are to be installed in early January 2023.
15. Annual filter maintenance on Filters #5 & #7 was conducted December 20th and January 6th. This included the removal of an air actuated flow control valve which was replaced with an electric actuated control valve. The inlet valve on the "B" side of Filter 7 was also replaced. The walls were power washed, media was inspected and measured then disinfected and sampled for bacteria. Filter #7 was put back into service on January 6th. Filter #5 remains out of service since the air valve actuator failed during inspection. A new electric actuator comes has been ordered and should be received and installed by the first week of February 2023.
16. DAF Phase 1 Update: The DAF#1 system was restarted on November 28th following completion of modifications to scum collection system. The DAF was put into service on November 29th with flow going to filters. Flow testing of the DAF was conducted for 7 days to monitor water quality over a range of flows.

Associated Engineering (AE) technical staff were on site on Dec 5th and 6th for DAF jar testing to determine coagulant dosing for optimal performance. AE will continue to assist UWSS and OCWA Union operations staff into January and February to optimize the DAF #1 system so as to ensure the best water quality effluent over a different range of flows.

The effluent valve on the DAF #1 has been upgraded to a modulating control valve to help maintain ideal water level in the DAF system to achieve optimal water quality. The new valve was installed on December 6th. SCADA programming for control of the modulating valve was completed by Summa Engineering on December 15th.

The new exterior stairs for the DAF unit were received and installed on Dec. 20th, 2023.

The work for the DAF #1 system has been completed. Substantial Completion of the project has been issued and published in the Daily Commercial News on December 30th, 2022.

Re: UW/02/23 - Status Update of UWSS Operations & Maintenance Activities and Capital Works from October 19, 2022 to January 12, 2023

17. An unannounced inspection by the Ministry of Environment Conservation and Parks (MECP) was conducted on January 10th for UWSS facilities including the Low Lift Pumping Plant, the Ruthven Water Treatment Plant and the Cottam Booster and Reservoir Station. Inspection report to follow.

The first chart shows comparative flows for 2018 through 2022 in Mega Litres (ML) and the second chart shows Millions of Imperial Gallons (MIG) for the period January 1st to December 31st, 2022.

	2018	2019	2020	2021	2022
Flow to Date (ML)	16,178.02	16,839.31	19,120.53	19,855.48	20,821.58
Max Day (ML)	82.48	85.40	97.33	93.83	99.17
Min Day (ML)	20.28	20.13	25.44	26.74	27.58
Average Day (ML)	44.32	46.14	52.24	54.40	57.05
No of Days	365	365	366	365	365

	2018	2019	2020	2021	2022
Flow to Date (MG)	3558.74	3704.20	4206.01	4368.96	4581.08
Max Day (MGD)	18.14	18.79	21.41	20.64	21.81
Min Day (MGD)	4.46	4.43	5.60	5.88	6.07
Average Day (MGD)	9.75	10.15	11.49	11.97	12.55
No of Days	365	365	366	365	365

Flows to date are up 966.1 ML (212.1 MIG) or 4.86% from last year. The 2022 flows to date are up 15.69% over the previous 4 year average.

2023 flow data will be reported starting with the February operations report, as there is less than two (2) weeks of data available in January 2023.

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

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

FROM: Rodney Bouchard, Union Water Manager

DATE: January 12, 2023

RE: Proposed 2023 UWSS Operations and Capital Budget



RECOMMENDATION

That the Union Water Supply System Joint Board of Management (UWSS Board) adopts the Proposed 2023 Operational and Capital Budget for the Union Water Supply System;

And further, that the UWSS Board adopts an increase of \$0.014 per cubic metre for the UWSS Wholesale Rate. The new proposed UWSS Wholesale Rate for 2023 would be \$0.7125 per cubic meter.

And further, that the UWSS General Manager be provided the delegated authority to implement the 2023 UWSS Operations & Maintenance Budget and Capital Program

REPORT HIGHLIGHTS

- Potable water demand from UWSS is anticipated to be approximately 21,747,000 m³ for 2023. This demand represents an increase of 4.5% over the forecasted year end demand for 2022. It should be noted that 2022 demand is approximately 5% higher than 2021 demand to date and it is anticipated that a similar increase in demand will occur in 2023.
- An increase of \$0.014/m³ is proposed for the UWSS Wholesale Rate. The new proposed wholesale rate for 2023 would be \$0.7125/m³.
- UWSS Revenue for 2023 is estimated at \$16,150,000. This includes estimated wholesale rate revenue of \$15,495,000, investment income of \$422,000, property rental revenue of \$60,000, and sundry revenue of \$23,000. This also includes \$150,000 municipal study revenue for a joint study between UWSS and Windsor Utilities Commission (WUC) where UWSS is leading the financial part of the study and will be reimbursed by ENWIN/WUC for 50% of the study costs.
- Operational and Debt Service Expenditures for 2023 are estimated at \$10,396,000. This includes \$3,831,000 OCWA Operations and Maintenance services and \$2,409,000 for Sunlife Loan (former MFP Debt).
- 2023 Revenue versus Operational and Debt Service Expenditures are anticipated to result in a surplus of approximately \$5,753,000;
- A Capital Program of \$6,620,000 is proposed for 2023. This includes a proposed Administration Building expansion (\$2 million), new backup generators at the Water Treatment Plant (\$2 million) and a significant major maintenance/ upgrade program (\$2.62 million).
- A draw of \$867,000 from the UWSS Reserves would be needed to fund the 2023 Capital Program.
- Total reserves for 2022 year end are forecasted to be \$18.4 million.

BACKGROUND:

Since the Transfer Order of January 2001 was put into place, the UWSS Board has been responsible for considering and approving an annual budget for the Union Water Supply System. The format of the 2023 budget is generally the same as that previously prepared for 2022 and previous years.

DISCUSSION:

The proposed 2023 UWSS Operations and Capital Budget package was provided to UWSS Board members in December 2022 for review. The UWSS General Manager is seeking approval of the proposed 2023 UWSS Budget so that critical studies and major capital upgrades and improvements can be initiated without delay.

This budget report is outlined to provide details in regards to the following:

- Anticipated revenue for 2023 from wholesale of water to the partner municipalities;
- Anticipated operating expenditures for 2023 including estimated costs for operation of the system by the Ontario Clean Water Agency (OCWA), under its contract with UWSS;
- Proposed Capital Works program for 2023 for UWSS;
- Forecasted Operational Expenditures and Capital Works program for 2023-2028.

The Proposed 2023 Budget documents have been prepared based on the discussions with the contracted operator, OCWA, in regards to operational budget, major maintenance needs, and existing operational issues that would require implementation of capital works to resolve. The Budget documents reflect the following:

- The operations and maintenance costs associated with the 5-Year (with option to renew for 5-years) Fixed Fee Operations Agreement between UWSS and OCWA that came into effect on January 1, 2019 and is to be reviewed in 2023;
- The proposed capital budget for 2023 that includes significant capital projects such as the expansion of the Administration Building, the purchase and installation of new backup generating power systems at the water treatment plant, and a long list of major maintenance and capital upgrades at UWSS facilities.

Details regarding the budget components are discussed below.

OPERATING EXPENDITURES

Expenditures for the Union Water Supply System (UWSS) consist of a) *Fixed Expenditures*, which includes the OCWA operations contract, UWSS Administration and debt service; and b) *Programs and Studies* that are proposed for 2023. The total projected expenditures for 2023 is budgeted at approximately at \$10,396,000.

January 12, 2023 - UW/03/23

Re: Proposed 2023 UWSS Operations and Capital Budget

Fixed Expenditures

Fixed expenditures for the budget process include the OCWA Operations Budget, UWSS Administrative Budget, and Debt Service. The total fixed expenditures for 2023 is budgeted at \$9,566,034. The fixed expenditures consist of the following components

OCWA Operations Budget:	\$3,831,155
UWSS Administrative Budget:	\$ 606,000
Legal/Professional Fees:	\$ 200,000
Leamington Administration Support:	\$ 50,000
Residuals Ponds Maintenance:	\$ 150,000
CO2 Gas Bulk Purchase Contract:	\$ 110,000
Watermain Repairs:	\$ 100,000
Un-Budgeted Repairs:	\$ 100,000
Water Quality/Corrosion Monitoring Program:	\$ 50,000
Land Transfer Tax:	\$ 147,255
Property Taxes:	\$ 162,690
Electricity and Natural Gas:	<u>\$ 1,650,000</u>
<i>Total Operations, Administrative, Energy:</i>	<i>\$7,157,100</i>
Debt Service:	
Sunlife Debt (MFP Debt):	<u>\$2,408,934</u>
<i>Total Debt Service:</i>	<i>\$2,408,934</i>
Total Fixed Costs:	\$9,566,034

January 12, 2023 - UW/03/23

Re: Proposed 2023 UWSS Operations and Capital Budget

Programs and Studies

A number of Programs and Studies are included in the 2023 Budget. These studies are designed to achieve one of the following goals:

- Assess and identify improvements to operational processes to improve cost efficiencies potentially resulting in decrease of fixed operations costs such as electricity costs and chemical costs;
- Evaluate water demand and water usage by various sectors including residential, commercial, industrial, and food processing/greenhouse industry to assess future capital infrastructure needs;
- Evaluate water quality to for potential issues such as toxic algae in raw water, nitrification issues in larger distribution systems, etc.
- Evaluate new technologies that may benefit UWSS' operations

For the 2023 budget year, \$830,000 has been allocated to Programs and Studies. The following studies are proposed or currently in place.

New WTP Reservoir #3 Study & Preliminary Engineering	\$170,000
UWSS-WUC Water Service Redundancy-Conceptual:	\$140,000
Peaking Plant Environmental Assessment:	\$120,000
Lake Erie HAB Monitoring Project:	\$100,000
Cottam 12-inch WM Replacement- Prelim. Engineering:	\$100,000
Leak Detection Study :	\$ 75,000
Backup Power Generation/Energy Study:	\$ 45,000
DAF #1 Optimization and WTP Capacity Testing:	\$ 40,000
UWSS Infrastructure Review and Master Servicing Plan:	<u>\$ 40,000</u>
Total:	\$830,000

Operating Expenditure Summary

Fixed Expenditures:	\$9,566,034
Programs and Studies:	<u>\$ 830,000</u>
Total Operating Expenditures for 2023:	\$10,396,034

REVENUE

Revenue for the budget process is mainly based on wholesale billings from the sale of potable water to the 4 municipal owners. A much smaller component of revenue is based on miscellaneous revenue such as investment income, property rental income, and sundry income. The total estimated revenue for 2023 is \$16,149,368

Wholesale Water Revenue Summary

Wholesale water revenue is based on annual water usage by the 4 owner municipalities and the wholesale water rates.

Water Usage

The projected water “usage” by municipal owners for 2023 is 21,747,451 m³ (4,784,000,000 imperial gallons), which is based on a 4.5% increase in water demand over 2022. It should be noted that 2022 demand is approximately 5% higher than 2021 demand to date and it is anticipated that a similar increase in demand will occur in 2023.

Figure 1 depicts the total UWSS water usage trend from 1998-2022 (value for 2022 is a projected total).

Figure 1

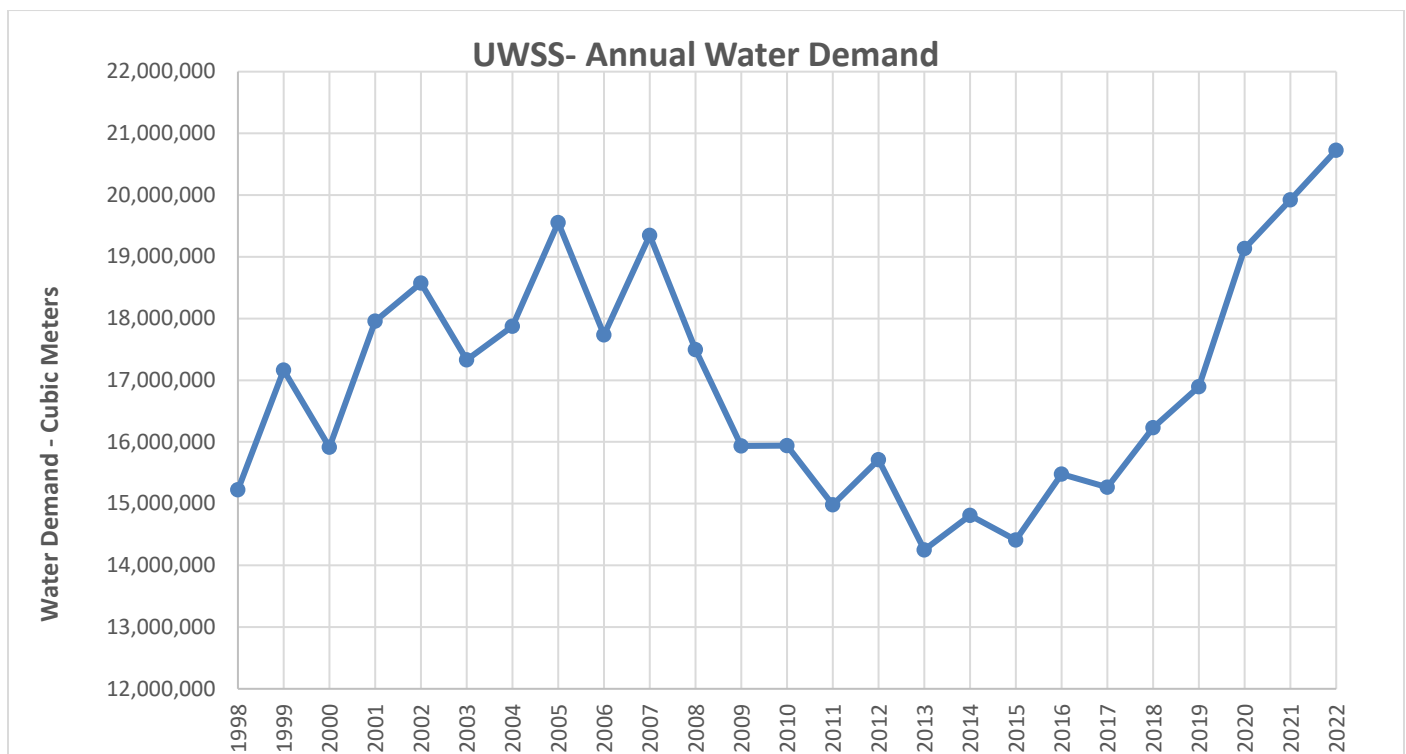


Figure 2 depicts cumulative daily water demand from 1998-2022.

Figure 2

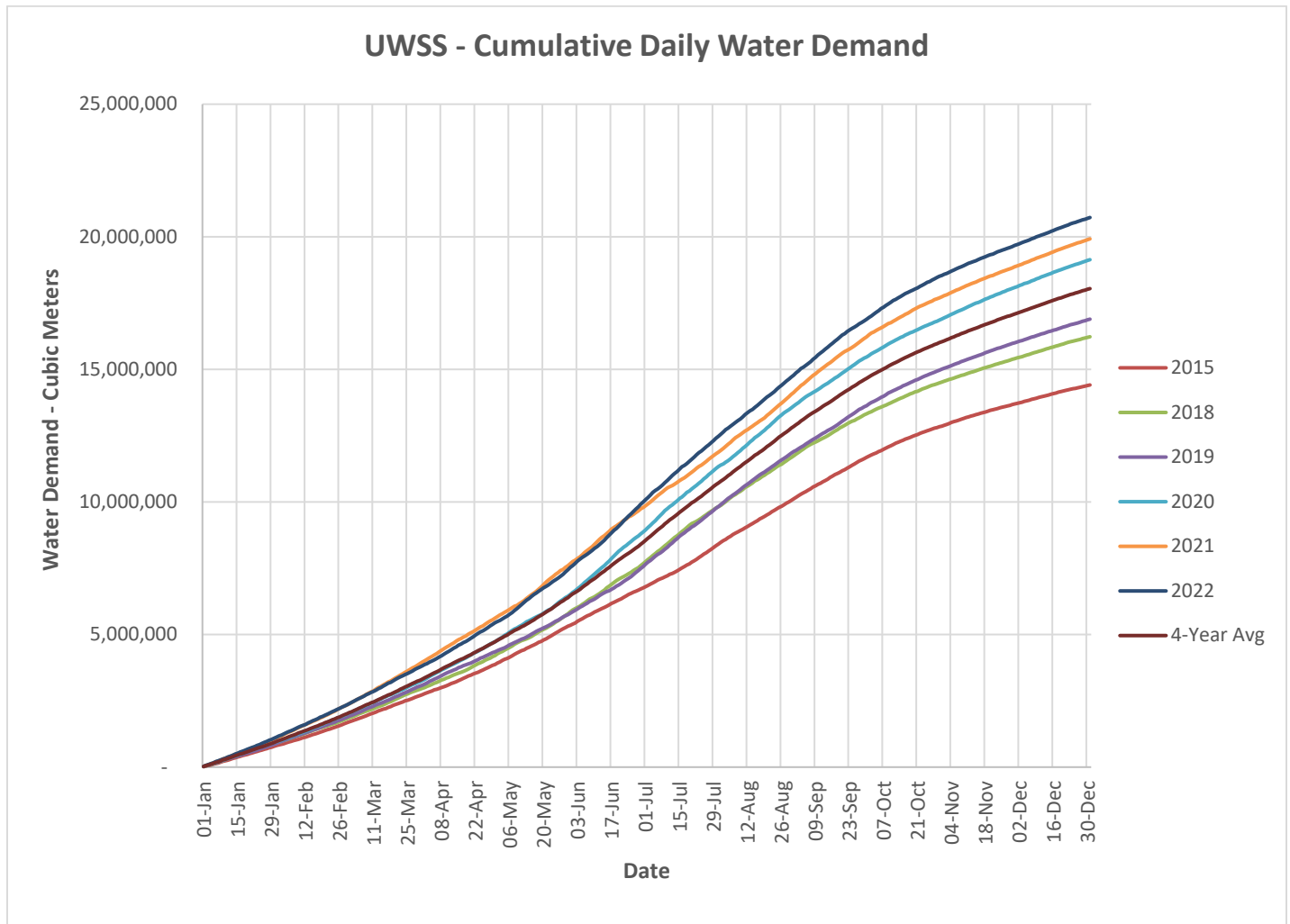
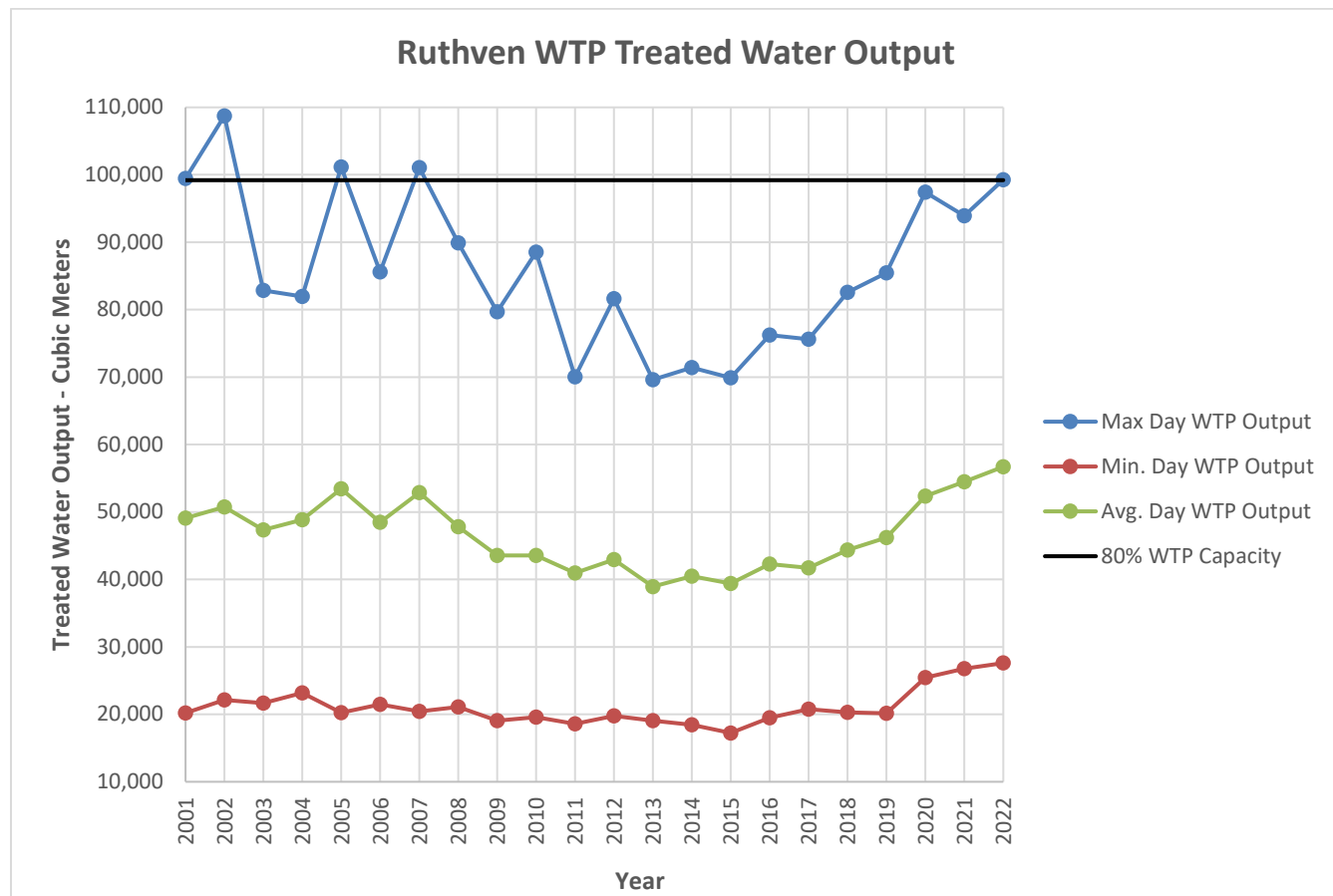


Figure 3 depicts the maximum, minimum and average daily treated water output from the UWSS' Ruthven Water Treatment Plant for the years 2001-2022.

Figure 3



Wholesale Water Rates

For the 2023 budgeting process, it is proposed that an increase of \$0.0140 per cubic meter be applied to the UWSS wholesale rate. This would result in a 2023 UWSS wholesale rate of \$0.7125 per cubic meter to be applied as of January 1, 2023.

Based on the anticipated water demand of 21,747,451 m3 of potable water for 2023, the wholesale rate water revenue is estimated at:

Wholesale Rate Revenue Total: \$15,495,059

January 12, 2023 - UW/03/23

Re: Proposed 2023 UWSS Operations and Capital Budget

Miscellaneous Revenue

Miscellaneous revenue includes income from investments and sundry income.

Investment (interest) income:	\$ 421,577
UWSS/WUC Study Reimbursement:	\$ 150,000
Property Rental Revenue:	\$ 60,000
Sundry revenue:	<u>\$ 22,731</u>
Total Misc. Revenue:	\$ 654,308

Sundry revenue is revenue received from various sources such as lease of space on water towers for telecommunications equipment. The property rental revenue is revenue from recently acquired property that is being leased to a tenant.

Revenue Summary

Wholesale Rate Revenue:	\$15,945,059
Miscellaneous Revenue :	<u>\$ 654,308</u>
Total Estimated Revenue for 2023:	\$16,149,368

REVENUE VERSUS OPERATING EXPENDITURES

A comparison of Revenue versus Expenditures for 2023 budget is as follows. It should be noted that the total estimated expenditures also include the proposed budget for operational Programs and Studies of \$830,000.

Total Estimated Revenue:	\$16,149,368
Total Estimated Expenditures:	<u>\$10,396,034</u>
Surplus/(Deficit):	\$ 5,753,334

CAPITAL PROGRAM

The proposed Capital Program for 2023 is budgeted at \$6,620,000.

January 12, 2023 - UW/03/23

Re: Proposed 2023 UWSS Operations and Capital Budget

Capital Works:

The following major capital works projects are proposed for 2023:

Administration Building Expansion :	\$2,000,000
New Backup Power Generating System - WTP	\$2,000,000
Meter Chamber Rehab Program	\$ 350,000
New High Lift Pump #7:	\$ 300,000
Albuna Water Tower Upgrades:	\$ 200,000
Wastewater System Upgrades:	\$ 200,000
Variable Frequency Drives for Low Lift Pumps:	\$ 150,000
Kingsville Water Tower utility building:	\$ 150,000
Distribution System Component Improvements:	\$ 150,000
Grounds Improvements (asphalt/road repairs, landscaping):	\$ 150,000
Bulk Water Fill Station - WTP	\$ 100,000
Outbuilding Improvements:	\$ 100,000
Low Lift Roof Replacement:	\$ 100,000
Filters 1&3 Control Console Upgrades:	\$ 75,000
Electrical Upgrade - Capacitors:	\$ 70,000
New Backup Wastewater Pump:	\$ 70,000
New Vehicle for UWSS:	\$ 65,000
Quench Buggy:	\$ 60,000
New Telephone System:	\$ 50,000
Water Quality Analyzers:	\$ 50,000
Surge Valves - High Lift Pumps #8 & 9:	\$ 50,000
Polymer System Upgrades:	\$ 40,000
Low Lift pump #4 rehab:	\$ 40,000
Fencing Upgrades:	\$ 40,000
SCADA Upgrades:	\$ 30,000
Travelling Screen #3:	\$ 30,000
Communication System Upgrades:	\$ 30,000
Air Compressor Upgrades:	<u>\$ 20,000</u>
Total Capital Works for 2023:	\$6,620,000

January 12, 2023 - UW/03/23

Re: Proposed 2023 UWSS Operations and Capital Budget

BUDGET SUMMARY

The proposed 2023 budget is summarized as follows:

Total Estimated Revenue: (includes wholesale rate revenue and miscellaneous revenue)	\$16,149,368
Total Estimated Operating Expenditures: (includes Operations Contract, UWSS Admin, Programs & Studies)	<u>(\$10,396,034)</u>
Revenue versus Operating Expenditures: Surplus/ (Deficit)	\$5,753,334
Capital Program: (includes Capital Purchases and Capital Works)	<u>(\$6,620,000)</u>
NET SURPLUS/ (DEFICIT) : (Operating surplus/deficit less Capital Program)	(\$866,666)

The capital program for 2023 will be funded through 2023 Revenue and UWSS Reserves.

CASH /RESERVES VERSUS DEBT

Cash and Reserves for UWSS as of January 1, 2023 are forecasted to be approximately \$18,415,000 dollars. It should be noted that of the estimated \$18,415,000 in available cash and reserves for 2023, approximately \$11,342,000 are dedicated to UWSS Settlement Reserve, which is associated with the 2006 settlement that was reached regarding the MFP debt. Although the UWSS Board has authority to use these funds as it sees fit, the intent is to keep these funds in an interest bearing account to offset the annual MFP Debt obligation and to function as a Rate Stabilizing Reserve Fund.

The 2023 UWSS Operating and Capital Budget projects a Net Deficit of \$866,666 for 2023 year end. Thus, it is anticipated that UWSS reserves at the end of 2023 will decrease to approximately \$17,548,000

Based on debt repayment schedules, the total UWSS long term debt balance as of January 1, 2023 is \$7,908,943 and consists solely of the Sunlife Loan (aka former MFP Debt) that has a term date of 2026. At the end of 2023, this debt will decrease to \$6,259,451.

January 12, 2023 - UW/03/23

Re: Proposed 2023 UWSS Operations and Capital Budget

PROPOSED 10-YEAR CAPITAL WORKS PLAN

The UWSS General Manager, with assistance and input from OCWA Operations Staff has developed a proposed 10-year Capital Works Plan (2023-2032) for the UWSS. This Plan reflects the intention to undertake upgrades and improvements to the UWSS to address lifecycle replacement/upgrade issues and to improve water treatment, storage and transmission efficiencies.

The Proposed 10-Year Capital Plan is included as Appendix B to this Report. The Plan identifies the proposed works for each year and the anticipated value of the works. The total proposed rate and Reserve funded capital works expenditures for 2023-2031 are projected at \$34.5 million. Proposed debt funded capital works for this period is valued at \$121 million and includes the proposed Reservoir #3/ UV project in 2023-2024 (\$35 million), replacement and upsizing of 12-inch watermain to Cottam in 2024-2025 (\$12 million) and new peaking water treatment plant in 2027-2028 (\$55 million).

CONCLUSIONS:

It is the UWSS Manager's opinion that the Budget presented in this report provides a Budget for UWSS that is fiscally prudent while also providing for the major maintenance and lifecycle replacements needed to ensure that UWSS facilities and operations are effective and sustainable for the future.

Respectfully submitted,



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

**2023 UWSS DRAFT OPERATIONS AND CAPITAL BUDGET
TABLES AND DETAILS**

**UNION WATER SUPPLY SYSTEM
2023 DRAFT BUDGET
Budget Summary**

	2022	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
	Approved Budget	Forecasted Year End	Total Budget	Total Budget	Total Budget	Total Budget	Total Budget	Total Budget	Total Budget	Total Budget	Total Budget	Total Budget
REVENUE												
Senior Government Grants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Wholesale Rate Billings	\$14,364,653	\$14,541,029	\$15,495,059	\$16,037,456	\$16,597,268	\$17,177,251	\$17,778,005	\$18,402,481	\$19,047,474	\$19,715,507	\$20,407,414	\$21,124,061
Investment Income	\$413,311	\$515,000	\$421,577	\$430,009	\$438,609	\$447,381	\$456,329	\$465,455	\$474,765	\$484,260	\$493,945	\$503,824
Sundry revenue	\$22,285	\$22,285	\$22,731	\$23,186	\$23,649	\$24,122	\$24,605	\$25,097	\$25,599	\$26,111	\$26,633	\$27,166
Property Rental Revenue	\$142,800	\$144,174	\$60,000									
Municipal Study Revenue	\$0	\$0	\$150,000									
Capital Rate Income - Greenhouse Sector	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL REVENUES	\$14,943,049	\$15,222,488	\$16,149,368	\$16,490,650	\$17,059,526	\$17,648,755	\$18,258,938	\$18,893,033	\$19,547,837	\$20,225,877	\$20,927,992	\$21,655,051
OPERATING EXPENDITURE												
General Administration	\$432,639	\$420,993	\$606,000	\$518,400	\$525,230	\$532,193	\$539,090	\$546,126	\$553,303	\$560,623	\$568,089	\$575,705
Leamington Assistance	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Miscellaneous Legal/Professional fees	\$150,000	\$185,000	\$200,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
OCWA Operating Contract	\$3,612,763	\$3,671,658	\$3,831,155	\$3,946,090	\$4,064,472	\$4,186,407	\$4,311,999	\$4,441,359	\$4,574,599	\$4,711,837	\$4,853,193	\$4,998,788
Programs and Studies	\$710,000	\$315,898	\$830,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Operational/Maintenance/Upgrades - General	\$325,000	\$349,224	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Property Taxes	\$159,500	\$159,500	\$162,690	\$165,944	\$169,263	\$172,648	\$176,101	\$179,623	\$183,215	\$186,880	\$190,617	\$194,430
Land Transfer Tax			\$147,255									
CO2 Liquified Gas Procurement	\$110,000	\$105,000	\$110,000	\$112,200	\$114,444	\$116,733	\$119,068	\$121,449	\$123,878	\$126,355	\$128,883	\$131,460
Electricity and Natural Gas	\$1,381,380	\$1,599,000	\$1,650,000	\$1,732,500	\$1,819,125	\$1,910,081	\$2,005,585	\$2,105,865	\$2,211,158	\$2,321,716	\$2,437,801	\$2,559,692
TOTAL OPERATING EXPENDITURES	\$6,931,282	\$6,856,273	\$7,987,100	\$7,150,133	\$7,367,534	\$7,593,061	\$7,826,843	\$8,069,421	\$8,321,153	\$8,582,411	\$8,853,583	\$9,135,075
Debt Service - Sunlife Loan	\$2,389,596	\$2,389,596	\$2,408,934	\$2,428,392	\$2,449,323	\$2,467,669	\$0	\$0	\$0	\$0	\$0	\$0
Capital Loan for Reservoir and UV - \$30million @ 3% for 10yrs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cottam WM replacement loan - \$12million @ 3% for 10yrs							\$0	\$0	\$0	\$0	\$0	\$0
TOTAL DEBT SERVICE EXPENDITURES	\$2,389,596	\$2,389,596	\$2,408,934	\$2,428,392	\$2,449,323	\$2,467,669	\$0	\$0	\$0	\$0	\$0	\$0
CASH CAPITAL EXPENDITURE												
Capital Repair, Maintenance & Upgrade Works	\$9,380,000	\$7,859,706	\$6,620,000	\$6,660,000	\$3,080,000	\$2,990,000	\$1,720,000	\$1,220,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
TOTAL CASH FUNDED CAPITAL EXPENDITURES	\$9,380,000	\$7,859,706	\$6,620,000	\$6,660,000	\$3,080,000	\$2,990,000	\$1,720,000	\$1,220,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
NET SURPLUS/(DEFICIT)	(\$3,757,829)	(\$1,883,087)	(\$866,666)	\$252,125	\$4,162,669	\$4,598,025	\$8,712,096	\$9,603,612	\$8,226,684	\$8,643,466	\$9,074,409	\$9,519,976
	2022	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
	Budget	Forecasted Year End	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget
Operating & Capital Reserves	\$9,005,422	\$9,005,422	\$7,122,335	\$6,255,668	\$6,507,793	\$10,670,462	\$15,268,487	\$23,980,582	\$33,584,195	\$41,810,879	\$50,454,345	\$59,528,754
Addition/(subtraction) from Operations Budget.	-\$3,757,829	-\$1,883,087	-\$866,666	\$252,125	\$4,162,669	\$4,598,025	\$8,712,096	\$9,603,612	\$8,226,684	\$8,643,466	\$9,074,409	\$9,519,976
Addition/(Subtraction) from Rate Stabilization Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating & Capital Reserves	\$5,247,593	\$7,122,335	\$6,255,668	\$6,507,793	\$10,670,462	\$15,268,487	\$23,980,582	\$33,584,195	\$41,810,879	\$50,454,345	\$59,528,754	\$69,048,731
Rate Stabilization Reserve	\$11,060,436	\$11,060,436	\$11,342,477	\$11,631,710	\$11,928,319	\$12,232,491	\$12,544,420	\$12,864,302	\$13,192,342	\$13,528,747	\$13,873,730	\$14,227,510
Interest (GIC at 2.55%)	\$282,041	\$282,041	\$289,233	\$296,609	\$304,172	\$311,929	\$319,883	\$328,040	\$336,405	\$344,983	\$353,780	\$362,802
Subtotal Rate Stabilization Reserve	\$11,342,477	\$11,342,477	\$11,631,710	\$11,928,319	\$12,232,491	\$12,544,420	\$12,864,302	\$13,192,342	\$13,528,747	\$13,873,730	\$14,227,510	\$14,590,311
(Subtraction) from Rate Stabilization Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Rate Stabilization Reserve	\$11,342,477	\$11,342,477	\$11,631,710	\$11,928,319	\$12,232,491	\$12,544,420	\$12,864,302	\$13,192,342	\$13,528,747	\$13,873,730	\$14,227,510	\$14,590,311
Total Reserves	\$16,590,070	\$18,464,812	\$17,887,378	\$18,436,112	\$22,902,953	\$27,812,906	\$36,844,885	\$46,776,536	\$55,339,625	\$64,328,075	\$73,756,264	\$83,639,042
Sunlife Debt	\$7,908,943	\$7,908,943	\$6,259,451	\$4,406,948	\$2,310,158	\$0	\$0	\$0	\$0	\$0	\$0	\$0

UNION WATER SUPPLY SYSTEM
2023 DRAFT BUDGET
Capital Program Budget

Item Description	Studies	Treatment Plant Upgrades & Renewals	Low Lift Upgrades	Cottam Booster Upgrades	SCADA / Communication/ Security System Upgrades	Transmission Facilities	General/ Various Facilities	TOTAL	Comments
STUDIES/PROGRAMS									
New Ruthven WTP Reservoir #3 Study/ Preliminary Engineering	\$170,000							\$170,000	Started in 2022- Completion in Spring 2023
UWSS-WUC Water Service Redundancy - Conceptual Design	\$140,000							\$140,000	Started in 2022 - Completion in Spring 2023
Peaking Plant EA	\$120,000							\$120,000	Jan 2023 Proposed Start
Lake Erie HAB Monitoring Project - UWSS & Univ. of Windsor/GLIER	\$100,000							\$100,000	Last Year of 3yr NSERC Grant Funded Study
Cottam 12-inch WM Replacement - Preliminary Engineering	\$100,000							\$100,000	Proposed Start in Early Summer 2023
Leak Detection Study	\$75,000							\$75,000	Proposed Start in Early Summer 2023
Backup power generation/ energy study	\$45,000							\$45,000	Started in 2022 - Completion in Spring 2023
DAF #1 Optimization and WTP Capacity Testing	\$40,000							\$40,000	Started in 2022 - Completion in Spring 2023
UWSS Infrastructure Review and Master Servicing Plan	\$40,000							\$40,000	Started in 2021 - Completion in Spring 2023
Total Studies/Programs	\$830,000							\$830,000	
CAPITAL WORKS/ MAJOR MAINTENANCE									
Low Lift #4 Rehab			\$40,000					\$40,000	
Low Lift Roof Replacement			\$100,000					\$100,000	
Travelling Screen #3 major maintenance			\$30,000					\$30,000	
Polymer System Upgrade - 4 new pumps		\$40,000						\$40,000	
Highlift Pump #7 - New		\$300,000						\$300,000	
Surge Valves for High Lift Pumps #8 and #9		\$50,000						\$50,000	
Air Compressor Upgrades		\$20,000						\$20,000	
Filter 1&3 Control Console Upgrades		\$75,000						\$75,000	
Electrical Upgrades - capacitors, etc.							\$70,000	\$70,000	
Communication System upgrades					\$30,000			\$30,000	
New Telephone System					\$50,000			\$50,000	
SCADA System Upgrades					\$30,000			\$30,000	
New Variable Frequency Drives (VFDs) and upgrades to Cottam Booster Pumps				\$150,000				\$150,000	
Albuna Water Tower Upgrades						\$200,000		\$200,000	
Distribution System Components						\$150,000		\$150,000	
Meter Chamber Rehabilitation						\$350,000		\$350,000	
Water Quality Analyzers - Turbidity/Chlorine/Multiparameter							\$50,000	\$50,000	
Wastewater Pump - New backup pump		\$70,000						\$70,000	
Wastewater Pond Upgrades		\$200,000						\$200,000	
Grounds Improvements (landscaping; asphalt/road repairs, etc)							\$100,000	\$100,000	
Outbuilding Improvements							\$100,000	\$100,000	
Fencing Upgrades - various areas							\$40,000	\$40,000	
Total Capital Works/ Major Maintenance		\$755,000	\$170,000	\$150,000	\$110,000	\$700,000	\$360,000	\$2,245,000	
NEW CAPITAL WORKS									
Administration Building Expansion with New Elevator		\$2,000,000						\$2,000,000	
Backup Power System Upgrades - New Generators at WTP							\$2,000,000	\$2,000,000	
Kingsville Water Tower new utility Building							\$150,000	\$150,000	
Bulk Water Fill Station - WTP							\$100,000	\$100,000	
Total New Capital Works		\$2,000,000	\$0	\$0	\$0	\$0	\$2,250,000	\$4,250,000	
CAPITAL PURCHASES									
Quench Buggy							\$60,000	\$60,000	
New Vehicle							\$65,000	\$65,000	
Total New Capital Purchases								\$125,000	
TOTAL MAJOR MAINTENANCE and CAPITAL		\$2,755,000	\$170,000	\$150,000	\$110,000	\$700,000	\$2,610,000	\$6,620,000	

**UWSS 10 -YEAR CAPITAL
PLAN TABLES AND DETAILS**

UW/04/23

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

From: Rodney Bouchard, Union Water Manager

Date: January 12, 2023

Re: UWSS Representative on the Essex Region Source Water Protection Committee



Recommendation:

That the UWSS Board nominate a representative to the Essex Region Source Protection Committee

Background:

An Essex Region Source Protection Committee (Essex Region SPC) has been established under the Clean Water Act 2006. The Essex Region SPC is responsible for preparing and maintain a Source Protection Plan for all of the municipal drinking water systems in Essex County, including the UWSS.

The Essex Region SPC consists of (15) members plus a Chair and must include five (5) members representing the municipal sector, five (5) members representing the economic sector (business and agriculture) and five (5) members representing the general community. The municipal representation has been structured to represent as broadly as possible the municipal interests of the entire area. One member is nominated by the UWSS Board to represent the UWSS and its participating municipalities.

The municipal sector representation on the Essex Region SPC has been structured as follows:

City of Windsor	2 members
Lakeshore	1 member
Amherstburg	1 member
Union Water Supply System	1 member

This division is intended to ensure that the municipal owners of the water treatment plants in the Essex Region are represented. In addition it is intended to ensure representation of the municipalities that could be affected by the Source Protection Plans for each water intake. Accordingly, the UWSS nominee is intended to represent the Town of Essex as well as the UWSS. Essex owns a water treatment plant in Colchester South but does not have direct representation on the Essex Region SPC.

Discussion:

In July 2022 the UWSS General Manager was informed by the Essex Region Source Water Protection project manager that the UWSS representative on the Essex Region SPC, former Kingsville Mayor Nelson Santos, had resigned from the Essex Region SPC effective July 18, 2022. Due to the resignation, the UWSS Board would need to nominate a new representative to sit on the Essex Region SPC. The UWSS Board was informed of the situation at the July 2022 UWSS Board meeting. At that meeting, the UWSS Board determined that it would be best to leave this decision to the new UWSS Board that would be appointed following the October 2022 municipal elections.

The following provides details on the role, obligations and recommended qualifications of an SPC member:

Summary of Member Obligations

- Five year commitment;
- Attendance at SPC meetings, as well as possibly additional public meetings or working group sessions during day or evening hours
- Representatives must reside, own property, rent property, be employed or operate a business in the Essex Region Source Protection Area
- Act as a liaison by bringing forward common concerns from their knowledge and experience in their sector to the committee and assist in communicating the committee's work
- Make decisions at the committee table
- Respect confidential information and abide by the process in place to safeguard confidential information

Member Qualifications

- Demonstrated ability to understand source protection science, concepts and technical reports
- Proven ability to act as liaison for the sector(s) being represented
- Problem solving, analytical, communication and organizational skills
- An openness to working together and with representatives from other sectors
- Knowledge of local watershed, community and issues
- Demonstrated ability to work with group dynamics and team environments; conciliatory decision-making skills
- Willingness and ability to travel around the Essex Region
- Has, or is capable of having direct contact with residents and landowners

The procedure for nomination of a UWSS representative to the Essex Region SPC is as follows:

Re: Nomination of UWSS Representative to sit on the Essex Region Source Water Protection Committee

1. The UWSS Board will nominate a representative for recommendation to Essex Region Source Protection Authority (Essex Region SPA) for appointment to the Essex Region SPC.
2. The UWSS General Manager will forward this name to Essex Region SPA with a request to appoint the nominee to the Essex Region SPC.
3. Essex Region SPA will appoint the nominee to the Essex Region SPC.

It should be noted that the UWSS Board can nominate either a UWSS Board member or staff member to represent UWSS on the Essex Region SPC. Historically, the UWSS representative has been a UWSS Board member.

Respectfully submitted,



Rodney Bouchard, P. Geo., General Manager
Union Water Supply System Joint Board of Management
rb/kmj

**Dates for the Union Water Supply System Joint Board of Management Meetings
for the 2023 Year**

February 15, 2023

March 17, 2023

April 19, 2023

May 17, 2023

June 21, 2023

July 19, 2023

August 16, 2023

September 20, 2023

October 18, 2023

November 15, 2023

December 20, 2023

Locations to be determined, but notification will be provided the Friday prior to the Board meeting.