Joint Board of Management Agenda Aylmer Area Secondary Water Supply System & Port Burwell Area Secondary Water Supply System September 17, 2025 – 1:00p.m.

Malahide Council Chambers 51221 Ron McNeil Line, Springfield

The Joint Board of Management met at the Springfield & Area Community Services Building, at 51221 Ron McNeil Line, Springfield, at 1:00p.m. The following were present:

(1)	<u>Call to Order</u>
	is appointed Chair and the meeting is called to order atp.m.
(2)	Disclosure of Pecuniary Interest
(3)	Adoption of Minutes of Previous Meeting(s)

Recommended Motion:

THAT the minutes of the Aylmer Area Secondary Water Supply System Joint Board of Management meeting held on June 18, 2025 be approved as presented.

Recommended Motion:

THAT the minutes of the Port Burwell Area Secondary Water Supply System Joint Board of Management meeting held on June 18, 2025 and July 30,2025 be approved as presented.

(4) Reports

- AASWSS-25-09 First and Second Quarter Operations Report

Recommended Motion:

THAT Report No. AASWSS-25-09 entitled "First and Second Quarter 2025 Operations Report" be received.

- PBASWSS-25-09 First and Second Quarter Operations Report

Recommended Motion:

THAT Report No. PBASWSS-25-09 entitled "First and Second Quarter 2025 Operations Report" be received.

- AASWSS-25-10 Review and Provision of Infrastructure report

Recommended Motion:

THAT Report No. AASWSS-25-10 entitled "Aylmer Area Secondary Water Supply System – 2025 Review and Provision of Infrastructure Report" be received.

- PBASWSS-25-07 Review and Provision of Infrastructure Report

Recommended Motion:

THAT Report No. PBASWSS-25-07 entitled "Port Burwell Area Secondary Water Supply System – 2025 Review and Provision of Infrastructure Report" be received.

- AASWSS-25-08 2026 Draft Budget & Financial Plan

Recommended Motion:

THAT Report No. AASWSS-25-08, being the 2026 Draft Budget, be received;

AND THAT the 2026 Budget be approved as presented;

AND THAT the 2026 water rate, in the amount of 1.544 per cubic metre, be approved;

AND THAT the Township's 2026 to 2031 Water Financial Plan be approved as presented;

AND THAT staff be authorized to carry out the administrative acts necessary to implement the 2026 Draft Budget including the submission of the 2026-2031 Water Financial Plan to the Ministry of Municipal Affairs and Housing for water drinking licence renewal.

- PBASWSS-25-08 2026 Draft Budget & Financial Plan

Recommended Motion:

THAT Report No. PBASWSS-25-08, being the Draft 2026 Budget, be received;

AND THAT the 2025 Budget be approved as presented;

AND THAT the 2025 water rate, in the amount of 3.91 per cubic metre, be approved;

AND THAT the Township's 2026 to 2031 Water Financial Plan be approved as presented;

AND THAT staff be authorized to carry out the administrative acts necessary to implement the 2026 Draft Budget including the submission of the 2026-2031 Water Financial Plan to the Ministry of Municipal Affairs and Housing for water drinking licence renewal.

1.	Municipality of Central Elgin – Letter of Support for - Municipal Housing Infrastructure Program (MHIP) - Health and Safety Water Stream (HSWS) Infrastructure Fund Application - Port Burwell Area Secondary System
(6)	New Business
None	
(7)	<u>Adjournment</u>
Recor	mmended Motion:
	the Aylmer Area Secondary Water Supply System Joint Board of Management adjourn p.m. to meet again on December 17, 2025 at 1:00 p.m.
Recor	nmended Motion:
	the Port Burwell Secondary Water Supply System Joint Board of Management adjourn p.m. to meet again on December 17, 2025 at 1:00 p.m.

(5)

Correspondence

Joint Board of Management Minutes Aylmer Area Secondary Water Supply System & Port Burwell Area Secondary Water Supply System June 18, 2025 – 1:00p.m.

Malahide Council Chambers 51221 Ron McNeil Line, Springfield

The Joint Board of Management met at the Springfield & Area Community Services Building, at 51221 Ron McNeil Line, Springfield, at 1:00p.m. The following were present:

Board Members:

Municipality of Central Elgin – Norman Watson Town of Aylmer – Pete Barbour Township of Malahide – Chester Glinski

Absent:

Municipality of Bayham - Tim Emerson

Staff:

Township of Malahide – Sam Gustavson, Jason Godby, Adam Boylan, and Allison Adams Municipality of Bayham – Thomas Thayer and Ed Roloson Municipality of Central Elgin – Alex Piggott

(1) Call to Order

Pete Barbour is appointed chair and the meeting is called to order at 1:03p.m.

(2) Disclosure of Pecuniary Interest

None.

(3) Adoption of Minutes of Previous Meeting(s)

Moved by: Norman Watson Seconded by: Chester Glinski

THAT the minutes of the Aylmer Area Secondary Water Supply System Joint Board of Management meeting held on March 19, 2025 be approved as presented.

Carried

Moved by: Chester Glinski Seconded by: Norman Watson

THAT the minutes of the Port Burwell Area Secondary Water Supply System Joint Board of Management meeting held on March 19, 2025 be approved as presented.

Carried

(4) Reports

- AASWSS-25-05- 2025 OCWA First Quarter Operations Report

Moved by: Norman Watson Seconded by: Chester Glinski

THAT Report No. AASWSS-25-05 entitled "2025 OCWA First Quarter Operations Report" be received.

Carried

- PBASWSS-25-05- 2025 OCWA First Quarter Operations Report

Moved by: Norman Watson Seconded by: Chester Glinski

THAT Report No. PBASWSS-25-05 entitled "2025 OCWA First Quarter Operations Report" be received.

Carried

- AASWSS-25-06 – 2024 Draft Financial Statements & Year End Report

Moved by: Chester Glinski Seconded by: Norman Watson

THAT the 2024 Audited Financial Statements be received;

AND THAT the Chair be authorized to sign all required audit-related correspondence from Graham, Scott, Enns LLP on behalf of the AASWSS Board;

AND THAT the Aylmer Area Secondary Water Supply System 2024 surplus be transferred to the Capital Replacement Reserve.

Carried

- PBASWSS-25-06 - 2024 Draft Financial Statements & Year End Report

Moved by: Norman Watson Seconded by: Chester Glinski

THAT the 2024 Audited Financial Statements be received;

AND THAT the Chair be authorized to sign all required audit-related correspondence from Graham, Scott, Enns LLP on behalf of the PBASWSS Board;

AND THAT the Port Burwell Area Secondary Water Supply System 2024 surplus be transferred to the Capital Replacement Reserve.

Carried

- AASWSS-25-07 - Board Governance

Moved by: Chester Glinski Seconded by: Norman Watson

THAT Report No. AASWSS-25-07 entitled "Board Governance" be received for information;

AND THAT the attached draft letter be approved for issuance to the Town of Aylmer on behalf of the Board.

Carried

(5) <u>Correspondence</u>

Member Watson noted that Central Elgin would also be providing a letter of support to be included in the submission package.

Moved by: Norman Watson Seconded by: Chester Glinski

That the correspondence items be noted and filed.

- Township of Malahide Letter of Support for Joint Health and Safety Water Stream (HSWS) Application for Rehabilitation of the Port Burwell Area Secondary System Transmission Main – Recommended for signing at Malahide Township Council Meeting – June 19, 2025
- 2. Municipality of Bayham Letter of Support Bayham's Participation in a Joint Health and Safety Water Stream (HSWS) Application for Rehabilitation of the Port Burwell Area Secondary System Transmission Main

- 3. Fire Chiefs Letter of Support Municipal Housing Infrastructure Program (MHIP) Health and Safety Water Stream Infrastructure Fund
- 4. Rob Flack M.P.P. Elgin-Middlesex-London Support for joint application under the Municipal Housing Infrastructure Program (MHIP) Health and Safety Water Stream for the Port Burwell Area Secondary Water Supply System(PBASWSS).
- 5. Southwestern Public Health Letter of Support for Health and Safety Water Stream (HSWS)
- 6. Ministry of the Environment, Conservation and Parks Letter of Support Health and Safety Water Infrastructure Fund (HSWS)
- 7. Andrew Lawton, M.P. Elgin-St.Thomas-London South Provincial Health and Safety Water Stream—Port Burwell Area Secondary Water Supply System

Carried

(6) New Business

 Review and Approval of PBASWSS Draft Letter of Support for Joint MHIP-HSWS Grant Application

Moved by: Norman Watson Seconded by: Chester Glinski

THAT the Port Burwell Area Secondary Water Supply System Joint Board of Management supports Malahide's participation in a joint application to the Municipal Housing Infrastructure Program – Health and Safety Water Stream (MHIP-HSWS) for the rehabilitation of the Port Burwell Area Secondary Water Supply System's transmission main on Nova Scotia Line;

AND FURTHER THAT the Board be authorized to sign a Letter of Support for the grant application.

Carried

Director Godby provided an update on the RFP for the preliminary engineering design, noting that the process closes on July 4th. He emphasized the importance of awarding the contract without delay to allow work to begin promptly. A meeting will be scheduled for the end of July at the call of the Chair, with availability dates to be circulated.

(7) Adjournment

Moved by: Norman Watson Seconded by: Chester Glinski

THAT the Aylmer Area Secondary Water Supply System Joint Board of Management adjourn at 1:47p.m. to meet again on September 17, 2025 at 1:00p.m.

Carried

Carried

Moved by: Norman Watson Seconded by: Chester Glinski

THAT the Port Burwell Secondary Water Supply System Joint Board of Management adjourn at 1:47p.m. to meet again on September 17, 2025 at 1:00p.m.

Board Chair – P. Barbour	
Clerk – A. Adams	

Joint Board of Management Minutes Aylmer Area Secondary Water Supply System & Port Burwell Area Secondary Water Supply System July 30, 2025 – 1:00p.m.

Malahide Council Chambers 51221 Ron McNeil Line, Springfield

The Joint Board of Management met at the Springfield & Area Community Services Building, at 51221 Ron McNeil Line, Springfield, at 1:00p.m. The following were present:

Board Members:

Municipality of Central Elgin – Norman Watson Township of Malahide – Chester Glinski Municipality of Bayham - Tim Emerson

Staff:

Township of Malahide – Sam Gustavson, Jason Godby, and Allison Adams Municipality of Bayham – Thomas Thayer and Ed Roloson

(1) Call to Order

Norman Watson is appointed chair and the meeting is called to order at 1:07p.m.

(2) Disclosure of Pecuniary Interest

None.

(3) Adoption of Minutes of Previous Meeting(s)

None.

(4) Reports

- PBASWSS-25-10 - Award of Engineering Services for the PBASWSS Transmission Watermain Replacement

Moved by: Tim Emerson Seconded by: Chester Glinski

THAT Report No. PBASWSS-25-10 entitled "Award of Engineering Services for the PBASWSS Transmission Watermain Replacement" be received;

AND THAT the Board of Management for Port Burwell Area Secondary Water Supply System direct the staff of the Administering Municipality to enter into an agreement with Stantec Consulting Ltd. for engineering services for the Port Burwell Area Secondary Water Supply System Transmission Watermain Replacement, as described in Township of Malahide RFP PW-25-08.

Carried

C-----

(5) Adjournment

Moved by: Chester Glinski Seconded by: Tim Emerson

THAT the Port Burwell Secondary Water Supply System Joint Board of Management adjourn at 1:12p.m.

Carried	
Board Chair – N. Watson	_
Clerk – A. Adams	_



REPORT NO. AASWSS-25-09

TO: Aylmer Area Secondary Water Supply System - Joint Board of

Management

DEPARTMENT: Public Works

MEETING DATE: September 17, 2025

SUBJECT: 2025 First and Second Quarter Operations Report

RECOMMENDATION:

THAT Report No. AASWSS-25-09 entitled "First and Second Quarter 2025 Operations Report" be received.

PURPOSE & BACKGROUND:

The Ontario Clean Water Agency (OCWA) and the Staff of the Administering Municipality (Township Staff), formally meet on a quarterly basis to review the operations and maintenance of the AASWSS. OCWA and the Township Staff discuss recommended lifecycle/capital work, bacteriological/chemical sample results, regulatory compliance, and possible emerging issues. OCWA provides detailed operations reports and performance assessment reports at these meetings.

COMMENTS & ANALYSIS:

This report is a summary of the operations and maintenance for the first and second quarters of 2025. This report is submitted to the Joint Board of Management to satisfy specific requirements of the QEMS Operational Plan for the AASWSS. Additionally, this approach ensures that the Joint Board of Management is kept informed on the operational performance of the water system on a continual basis by Township Staff.

The Township Staff met with OCWA to discuss the attached operations report on August 11, 2025. At their meeting, Township and OCWA Staff reviewed the system operations for the first and second quarters of 2025. Some of the specific items that were discussed are outlined below.

Compliance Summary:

There were no compliance or exceedance issues during the first and second quarters of 2025.

Inspections:

There were no MECP or MOL inspections during the first and second quarters of 2025.

QEMS Update:

On February 11th, OCWA updated the Essential/Emergency Service and Supply Contact List. Updates were made to Client contacts along with OCWA Staff updates. This is the 38th revision to the list to date.

OCWA completed an Internal QEMS Audit on April 7th, and 9 OFIs (Opportunity for Improvement) were identified. These OFIs were considered at the Management review held on May 20th. As noted in OCWA's report, a re-accreditation audit with Intertek was scheduled and occurred on August 4th.

Performance Assessment:

The average daily flow to the system from the Elgin Area Primary Water Supply System thus far in 2025 was 4,850.0 m³/d, which is a 3.8% decrease when compared to 2024 (5,034.4 m³/d).

Weekly microbiological samples were taken by OCWA via sampling stations throughout the transmission main. Bacteriological samples are collected at 3 separate locations each week. A free chlorine grab sample is taken at each location and tested in the field at the same time the bacteriological samples are collected. An additional grab sample is also collected and tested for free chlorine in the field at a fourth location on sample days. Samples are tested for E. coli, Total coliforms and HPCs. Samples are shipped to SGS laboratories (an accredited laboratory).

There were no adverse sample results during the first and second quarters of 2025.

OCWA tested for free chlorine residuals throughout the distribution system two times per week. Quarterly samples were collected for Trihalomethanes (THMs) and Halo Acetic Acids (HAAs) in accordance with regulatory requirements. All sample results tested were well below the Maximum Allowable Concentrations (MAC) set forth in O.Reg. 170/03. OCWA continues to meet or exceed the Provincial Regulations pertaining to microbiological sampling requirements.

Further information relating to water sampling results is outlined in the attached report.

General Maintenance:

OCWA conducted various maintenance activities during the first and second quarters of 2025. Activities include but are not limited to regular readings and checks, the inspection and pumping of all chambers (including air release chambers), and monthly alarm testing. Annual meter calibrations were completed in March 2025. Spring hydrant flushing was also completed in Q2 of this year. Further information regarding maintenance completed in 2025 can be found in the attached report.

Alarms:

There were some alarms that occurred during the first and second quarters of 2025. These alarms were minor in nature and received the appropriate response from OCWA at the time they occurred. Further information regarding alarms can be found in the attached report.

Complaints & Concerns:

There were no complaints from the public that required a response during the first and second quarters of 2025.

SUMMARY:

Quarterly meetings with OCWA are an effective tool used to keep the Township Staff well informed as to the operations and maintenance of the drinking water system. The information provided to the Board by OCWA is used to help the Joint Board of Management make well-thought-out decisions in an effort to provide a continual safe supply of potable water.

ATTACHMENTS:

1. OCWA 2025 Second Quarter Operations Report

Prepared by: S. Gustavson, Water/Waste Water Operations Manager

Reviewed by: J. Godby, Director of Public Works

Approved by: N. Dias, Chief Administrative Officer



Aylmer Area Secondary Water Supply System Operations Report Second Quarter 2025

Ontario Clean Water Agency, Southwest Region Vitaliy Talashok, Sr. Operations Manager, Aylmer Cluster Date: July 15, 2025

Facility Description

Facility Name: Aylmer Area Secondary Water Supply System

Regional Manager: Sam Sianas - (519) 319-2233
Sr. Operations Manager: Vitaliy Talashok - (226) 378-8986
Business Development Manager: Robin Trepanier - (519) 791-2922

Facility Type: Municipal

Classification: Class 2 Water Distribution
Drinking Water System Category: Large Municipal Residential

Title Holder: Municipality
Operation Status: OCWA

Service Information

Area(s) Serviced: Central Elgin, Malahide, and Aylmer

Population Serviced: 382 Malahide Direct Connections: 147 Central Elgin Connections: 101

Operational Description

This is an 18" watermain from St. Thomas to Aylmer with booster pumps at the Elgin Middlesex Pumping Station.

CLIENT CONNECTION MONTHLY CLIENT REPORT

Facility Name: Aylmer Area Secondary Water Supply System

ORG#: 6614

SECTION 1: COMPLIANCE SUMMARY

FIRST QUARTER:

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

SECOND QUARTER:

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

SECTION 2: INSPECTIONS

FIRST QUARTER:

There were no MECP or MOL inspections conducted during the first quarter.

SECOND QUARTER:

There were no MECP or MOL inspections conducted during the second quarter.

SECTION 3: QEMS UPDATE

FIRST QUARTER:

On February 11th, the Essential/Emergency Service and Supply Contact List was updated to include changes to OCWA staff contacts as well as client contacts. The contact list is currently in its 38th revision and is reviewed annually.

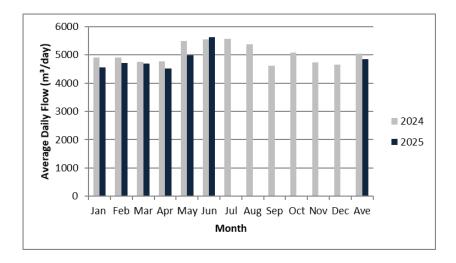
SECOND QUARTER:

On April 7th an internal audit was completed for the Aylmer Secondary system. There were 9 OFI found that were discussed at the management review on May 20th. The reaccreditation audit with Intertek is scheduled for August 4th.

SECTION 4: PERFORMANCE ASSESSMENT REPORT

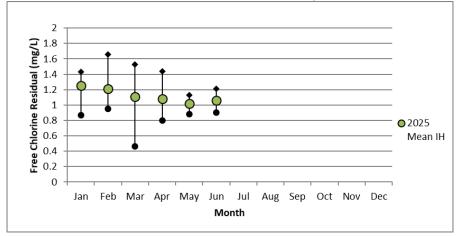
Flows are recorded at various points within the distribution system. The average daily flow to the system from the Elgin Area Primary Water Supply System in 2025 so far was 4,850.0m³/d which is down 3.8% when compared to 2024 (5,034.4m³/d). Chart 1 below depicts the average daily flows for 2025 compared to 2024.

Chart 1. Average daily flows in 2025 compared to 2024.



Chlorine residuals are obtained throughout the distribution system two times per week, with 4 residuals taken on sample days (usually Monday's) and three residuals taken at least 48 hours after the first set (usually on Friday's) to meet the regulatory requirements. The chart below depicts the minimum, maximum and average chlorine residuals taken in the distribution system for 2025. The concentration of free chlorine varies depending on the location that the sample taken (see chart below).

Chart 2. Free Chlorine Residual in the Distribution System in 2025.



Samples are obtained once per week at three locations along the transmission main. The following table summarizes the results of the microbiological sampling for 2025.

Month	# Samples	E. coli Range (cfu/100mL)	Total Coliform Range (cfu/100mL)	# Samples	Heterotrophic Plate Count Range (cfu/mL)
January	12	0 - 0	0 - 0	4	<10 - <10
February	12	0 - 0	0 - 0	4	<10 - <10
March	15	0 - 0	0 - 0	5	<10 - <10
April	12	0 - 0	0 - 0	4	<10 - 10
May	12	0 - 0	0 - 0	4	<10 - 40
June	15	0 - 0	0 - 0	5	<10 - <10
July	-	-	-	-	-

August	-	-	-	-	-
September	-	-	-	-	-
October	-	-	-	-	-
November	-	-	-	-	-
December	-	-	-	-	-

Trihalomethanes (THMs) are sampled on a quarterly basis; the 2025 current running average is $22.00\mu g/L$. When comparing the current running average to the 2024 average ($23.00\mu g/L$) there has been a decrease of 4.3%. The results remain well below the limit of $100 \mu g/L$.

January 2025	-	17
April 2025	-	17
July 2024	-	24
October 2024	-	30
Running Average	100	22.00

Haloacetic Acids (HAAs) are required to be sampled on a quarterly basis. The 2025 current running average is $7.08\mu g/L$. When comparing the current running average to the 2024 average (9.30 $\mu g/L$) there has been a decrease of 23.9%. The results remain well below the limit of $80\mu g/L$.

	Limit (µg/L)	HAA Result (μg/L)
January 2025	-	6.9
April 2025	-	5.3
July 2024	-	8.3
October 2024	-	7.8
Running Average	80	7.08

SECTION 5: OCCUPATIONAL HEALTH & SAFETY

FIRST QUARTER:

On February 28th, the annual occupational health and safety inspection was completed. There were no issues identified. There were no additional Health & Safety issues identified in the first quarter.

SECOND QUARTER:

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

SECTION 6: GENERAL MAINTENANCE

FIRST QUARTER:

JANUARY

- 2: Chamber inspections and meter reads.
- 5: Received emergency locate request at 08:36 for 44330 elm line. Arrived on site at 09:40. Received locate instructions from crew on site for water main repair. Completed all clear locate. Sent locate via email at 10:00. Left site at 10:10.

FEBRUARY

- 6: Hawkins Electric on site for replacement of cabinet heater
- 13: Tested flood and power failure alarms at chambers 13 and 16

MARCH

11: -On site at 47222 Talbot Line for leak repair.

OMEGA and CC dance on site and are beginning to excavate area. Disinfected new stainless steel repair saddle and new service line saddle with 3/4-inch port for installation. Leak now exposed and air gap being maintained. Leaky saddle the reason for leak. Positive pressure being maintained. Throttled down water pressure at site of repair by opening up the 3" bypass isolation valve and closing 18inch watermain. Omega will be sliding on the new repair clamp and service repair clamp while main is at about 30psi. Flushed hydrant on Talbot for 10 minutes to reduce mainline pressure for service repair

Pressure remained above 30 psi. Water leak now repaired.

Two repair clamps now installed, and all repair parts disinfected before being put into place. Still waiting on live tap for new service line to be installed. Opened back up the isolation valve at chamber 16 and closed 3inch bypass valves. Live tap completed, 10 ft of new PVC service line installed from corporation stop to old curb stop. All parts disinfected before installation.

Obtained a residual through site of repair at 14:07-1.09ppm free.

Excavation area now being filled, everything now returned to normal operation. Refer to service repair form for more details.

-Flowmetrix completed flow meter calibrations at chamber 13, chamber 16 and Rogers Road 19: Completed monthly alarm testing for chamber 16 and 13. All working as intended.

SECOND QUARTER:

APRIL:

- 22: Completed Spring hydrant flushing.
- 25: Completed monthly alarm testing for chamber 13 and 16. Alarms received and acknowledged.

MAY:

- 6: Completed live tap on 46268 New Sarum line.
- 8: completed monthly chamber inspections and pumped down chambers accordingly.
- 9: Completed monthly alarm testing for chamber 13 and 16
- 14: completed sample station install at 45024 Talbot line
- 29: completed chamber inspections and pumped out chambers accordingly

JUNE

- 3: completed chambers inspections for the month along with meter reads
- 23: completed chambers 13 and 16 flood and power failure alarm tests. Alarms acknowledged.
- 26: completed air relief valve chamber inspections and pump outs accordingly. Pumped out tower road chamber to inspect for a leak. No leak was detected after returning to the site 3 hours later. Water in chamber is likely due to rainwater from leaky manhole lid.

SECTION 7: ALARM SUMMARY

FIRST QUARTER:

JANUARY

5: Completed emergency locate request for 44330 Elm Line

FEBRUARY

No alarms to report for the month of February.

MARCH

No alarms to report for the month of March.

SECOND QUARTER:

APRIL:

No alarms for the month of April.

MAY:

- 11: Comm alarm for chamber 13, arrived onsite to ensure readings were normal. Monitored site and ensured communications were coming through. Communications returned to normal and all appears normal.
- 13: Comm alarm at Chamber 16, arrived onsite to ensure readings were normal. No readings are present on SCADA. Communicated with Execuline and problems are believed to be caused by third party maintenance. Cycled power to modem and no change. Readings eventually returned to SCADA, and all appears normal.
- 17: Power fail alarm at chamber 13 and flow meter fault alarm at 0151. SCADA readings show all readings are normal. Power outage reported on Hydro One website. Power restored to site at 0845. Readings monitored throughout and all readings and pressure stayed within regulatory standards.

JUNE:

- 4: Comm failure for chamber 13 and 16. Both sites reading on SCADA. Pressures and readings normal.
- 19: Comm failure alarm for chamber 13. Arrived onsite, all appears normal. Cycled power to modem. Problem did not reoccur.

SECTION 8: COMMUNITY COMPLAINTS & CONCERNS

FIRST QUARTER:

There were no complaints or concerns reported during the first quarter.

SECOND QUARTER:

There were no complaints or concerns reported during the second quarter.

AASWS01 Locates				
Month # of Locates Completed				
January 1				
February	2			
March	4			
April	0			

May	0
June	0
July	
August	
September	
October	
November	
December	



REPORT NO. PBASWSS-25-09

TO: Port Burwell Area Secondary Water Supply System - Joint Board of

Management

DEPARTMENT: Public Works

MEETING DATE: September 17, 2025

SUBJECT: 2025 First and Second Quarter Operations Report

RECOMMENDATION:

THAT Report No. PBASWSS-25-09 entitled "First and Second Quarter 2025 Operations Report" be received.

PURPOSE & BACKGROUND:

The Ontario Clean Water Agency (OCWA) and the Staff of the Administering Municipality (Township Staff) formally meet on a quarterly basis to review the operations and maintenance of the PBASWSS. OCWA and the Township Staff discuss recommended lifecycle/capital work, bacteriological/chemical sample results, regulatory compliance, and possible emerging issues. OCWA provides detailed operations reports and performance assessment reports at these meetings.

COMMENTS & ANALYSIS:

This report is a summary of the operations and maintenance for the first and second quarters of 2025. This report is submitted to the Joint Board of Management to satisfy specific requirements of the QEMS Operational Plan for the PBASWSS. Additionally, this approach ensures that the Joint Board of Management is kept informed on the operational performance of the water system on a continual basis by the Township Staff.

The Township Staff met with OCWA to discuss the attached operations report on August 11, 2025. At their meeting, Township and OCWA Staff reviewed the system operations for the first and second quarters of 2025. Some of the specific items that were discussed are outlined below.

Compliance Summary:

There were no compliance or exceedance issues in the first and second quarters of 2025.

Inspections:

There were no MECP or MOL inspections during the first quarter of 2025.

QEMS Update:

OCWA completed an Internal QEMS Audit on March 25th. There were no non-conformances; however, 15 OFIs (Opportunity for Improvement) were identified. These OFIs were considered by Management in May 2025.

The management review for the Port Burwell Secondary was held on May 20th. The operational plan was updated, and documents were sent to Intertek prior to the reaccreditation audit, which was scheduled and occurred on August 4th.

Performance Assessment:

The average daily flow to the system from the Elgin Area Water Supply System (recorded at MV1) thus far in 2025 was 745.7 m³/d. This is a 0.8% decrease when compared to 2024 (751.8 m³/d).

Weekly microbiological samples were taken by OCWA via sampling stations throughout the transmission main. Bacteriological samples are collected at 3 separate locations each week. A free chlorine grab sample is taken at each location and tested in the field at the same time the bacteriological samples are collected. An additional grab sample is also collected and tested for free chlorine in the field at a fourth location on sample days. Samples are tested for E. coli, Total coliforms and HPCs. Samples are shipped to SGS laboratories (an accredited laboratory).

There were no adverse sample results during the first and second quarters of 2025.

OCWA tested chlorine residuals throughout the distribution system two times per week. There are also three continuous online chlorine analyzers for the system located at the Port Burwell Tower, Dexter Line and the Lakeview re-chlorination facilities. These analyzers provide continuous data and trending for each facility and are connected to SCADA with the ability to notify operators in the event an alarm occurs, which requires the Operator's response. OCWA continues to meet or exceed the Provincial Regulations pertaining to microbiological sampling requirements.

Quarterly samples were collected for Trihalomethanes (THMs) and Halo Acetic Acids (HAAs) in accordance with regulatory requirements. All sample results tested were well below the Maximum Allowable Concentrations (MAC) set forth in O.Reg. 170/03.

OCWA continues to meet or exceed the Provincial Regulations pertaining to microbiological sampling requirements.

Further information relating to water sampling results is outlined in the attached report.

General Maintenance:

OCWA conducted various maintenance activities during the first and second quarters of 2025. Activities include, but are not limited to, regular readings and checks, the inspection and pumping of air release chambers, chemical feed system repairs at rechlorination facilities, and monthly alarm testing. Annual flow meter and pressure transmitter calibrations were completed in March 2025. Spring hydrant flushing was also completed in Q2 of this year, but is not mentioned in the OCWA report attached. Further information regarding maintenance completed in 2025 can be found in the attached report.

Alarms:

OCWA reported multiple alarms during the first and second quarters of 2025. Some alarms were a result of communication failures of the SCADA system and power failures. There were also various alarms resulting from the re-chlorination facilities outlined in the attached report. All alarms in the first and second quarters were minor in nature and were responded to and resolved by OCWA as outlined in the attached report.

Complaints & Concerns:

There were no complaints received during the first and second guarters of 2025.

SUMMARY:

Quarterly meetings with OCWA are an effective tool used to keep the Township Staff well-informed as to the operations and maintenance of the drinking water system. The information provided to the Board by OCWA is used to help the Joint Board of Management make well-thought-out decisions in an effort to provide a continual safe supply of potable water.

ATTACHMENTS:

1. OCWA 2025 Second Quarter Operations Report

Prepared by: S. Gustavson, Water/Waste Water Operations Manager

Reviewed by: J. Godby, Director of Public Works

Approved by: N. Dias, Chief Administrative Officer



Port Burwell Area Secondary Water Supply System Operations Report Second Quarter 2025

Ontario Clean Water Agency, Southwest Region Vitaliy Talashok, Sr. Operations Manager, Aylmer Cluster Date: July 15, 2025

Facility Description

Facility Name: Port Burwell Area Secondary Water Supply System

Regional Manager: Sam Sianas – 519-319-2233
Sr. Operations Manager: Vitaliy Talashok – 226-378-8986
Business Development Manager: Robin Trepanier – 519-791-2922

Facility Type: Municipal

Classification: Class 2 Water Distribution
Drinking Water System Category: Large Municipal Residential

Title Holder: Municipality
Operation Status: OCWA

Service Information

Area(s) Serviced: Municipality of Central Elgin, Malahide & Bayham

Population Serviced: 624
Malahide Direct Connections: 163
Central Elgin Connections: 61

Operational Description

This is a 12-inch watermain from the Elgin Area Water Treatment Plant to Port Burwell including an elevated tank west of Pt. Burwell. Includes re-chlorination at the tower, Dexter and at Lakeview Re-Chlorination Facility.

CLIENT CONNECTION MONTHLY CLIENT REPORT

Facility Name: Port Burwell Secondary - Lakeview, Dexter, Burwell tower, Valve house

ORG#: 5911

SECTION 1: COMPLIANCE SUMMARY

FIRST QUARTER:

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

SECOND QUARTER:

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

SECTION 2: INSPECTIONS

FIRST QUARTER:

There were no MECP or MOL inspections conducted during the first quarter.

SECOND QUARTER:

There were no MECP or MOL inspections conducted during the second quarter.

SECTION 3: QEMS UPDATE

FIRST QUARTER:

On March 25th the internal audit was completed by Maegan Garber. No non-conformities were identified and fifteen (15) opportunities for improvement (OFI's). The management review is scheduled to be completed in May, 2025.

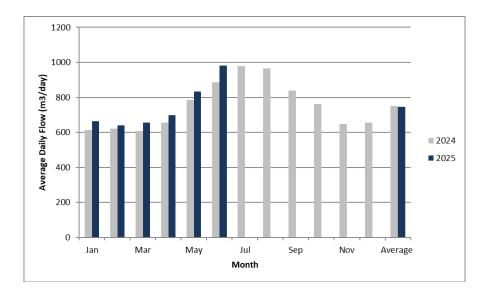
SECOND QUARTER:

On May 20th the management review for Port Burwell Secondary was held. The operational plan was updated and documents have been sent to Intertek for the reaccreditation audit scheduled for August 4th.

SECTION 4: PERFORMANCE ASSESSMENT REPORT

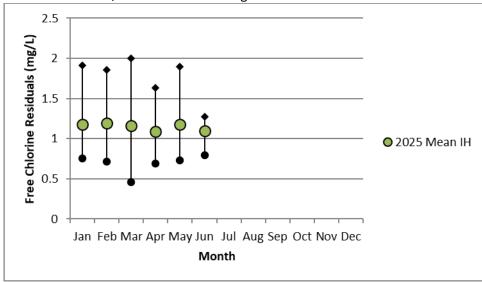
Flows are recorded at various points within the distribution system. The average daily flow to the system from the Elgin Area Primary Water Supply System (recorded at MV1) in 2025 so far is 745.7 m³/d. This is down 0.8% when compared to 2024 (751.8 m³/d). Chart 1 below depicts the average daily flow in 2025 compared to 2024.

Chart 1. Average daily flow from the EMPS in 2025 compared to 2024.



Chlorine residuals are obtained throughout the distribution system two times per week, with 4 residuals taken on sample days (usually Mondays) and three residuals taken at least 48 hours after the first set (usually on Fridays) to meet the regulatory requirements. Chart 2 below depicts the minimum, maximum and average chlorine residuals taken in the distribution system in 2025. The concentration of free chlorine varies depending on the location of sample taken. All results met regulatory requirements.

Chart 2. Minimum, maximum and average chlorine residuals in 2025.



The chlorine residuals are continuously monitored at the re-chlorination facilities at Dexter Line, the Tower and Lakeview. Chart 3 below provides the monthly average, minimum and maximum free chlorine residuals at the Dexter Line Re-Chlorination Facility in 2025.

Chart 3. Minimum, maximum and average chlorine residuals recorded at Dexter Line Re-chlorination in 2025.

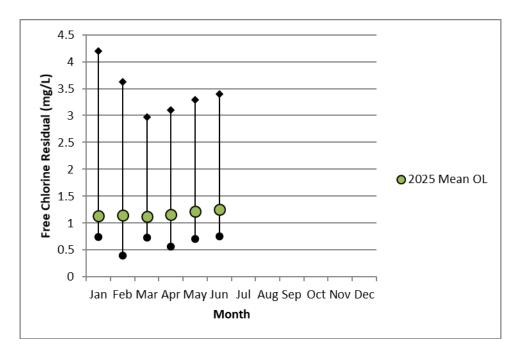


Chart 4 below provides the monthly average, minimum and maximum free chlorine residuals at the Port Burwell Tower in 2025. The residuals at the tower fluctuate depending on the fill cycles.

Chart 4. Minimum, maximum and average chlorine residuals recorded at Port Burwell Tower in 2025.

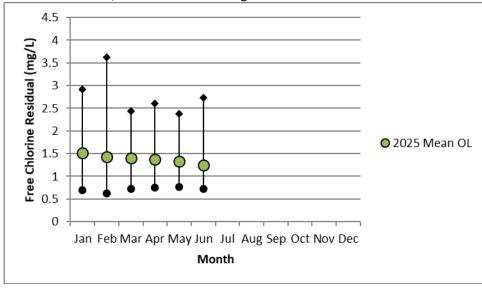
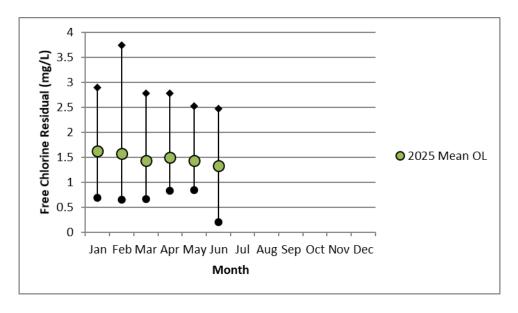


Chart 5 below provides the daily average, minimum and maximum free chlorine residuals at the Lakeview Rechlorination Facility in 2025.

Chart 5. Minimum, maximum and average chlorine residuals recorded at Lakeview Re-chlorination in 2025.



Samples are obtained once per week at three locations in the distribution system. Table 1 summarizes the results of the microbiological sampling.

Table 1. Summary of microbiological sampling in 2025.

Month	# Samples	E. coli Range (cfu/100mL)	Total Coliform Range (cfu/100mL)	# Samples	Heterotrophic Plate Count Range (cfu/mL)
January	8	0 - 0	0 - 0	4	<10 - <10
February	8	0 - 0	0 - 0	4	<10 - <10
March	10	0 - 0	0 - 0	5	<10 - <10
April	8	0 - 0	0 - 0	4	<10 - <10
May	8	0 - 0	0 - 0	4	<10 - <10
June	10	0 - 0	0 - 0	5	<10 - 10
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
October	-	-	-	-	-
November	-	-	-	-	-
December	-	-	-	-	-

Trihalomethanes (THMs) are sampled on a quarterly basis; the current running average is $34.50\mu g/L$. When comparing the current running average to the 2024 average ($35.75\mu g/L$) there has been a decrease of 3.5%. The results are well below the limit of $100~\mu g/L$ (refer to Table 2).

Table 2. Summary of THM sample results

	Limit (µg/L)	THM Result (μg/L)
January 2025		34
April 2025		25
July 2024		32

October 2024		47
Running Average	100	34.50

Haloacetic Acids (HAAs) are required to be sampled on a quarterly basis. The current 2025 running average is $17.10\mu g/L$ (refer to Table 3). When comparing the current running average to the 2024 average ($16.23\mu g/L$) there has been an increase of 5.4%. The results are well below the limit of $80\mu g/L$.

Table 3. Summary of HAA sample results

	Limit	HAA Result
	(μg/ L)	(μg/ L)
January 2025		18.6
April 2025		16.6
July 2024		21.8
October 2024		11.4
Running Average	80	17.10

SECTION 5: OCCUPATIONAL HEALTH & SAFETY

FIRST QUARTER:

On February 28th, the annual occupational health and safety inspection was completed. There were no issues identified. There were no additional Health & Safety issues identified in the first quarter.

SECOND QUARTER:

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

SECTION 6: GENERAL MAINTENANCE

FIRST QUARTER:

JANUARY

2: Dexter rechlor - Chlorine pump trending appeared off on scada

Pump 2 was running but chlorine residual was not increase

When on site pump 2 was running but could not increase residual over 1.20

Switched pumps to duty manual and pump 1 increased residual to stop point 1.30

While off advanced pump 2 and opened air valve. Looked like large air bubble in line

Closed air valve and reset panel valves.

Allowed pump 1 to run again

When pump 2 ran took a long time to get residual to stopping point 1.30

Will continue to monitor pump

15: Port Burwell tower, Dexter, Lakeview rechlor – Tested critical alarms

17: Landmark on site for annual ladder Safety inspection.

: MV1, Dexter, Port Burwell tower and Lakeview rechlor – Tested flood alarms

23: MV1 – On site for chlorine delivery

FEBRUARY

05: Installed new chlorine tank at lakeview

11: Port Burwell tower, Dexter, Lakeview rechlor – Tested critical alarms

12: MV1 and Dexter rechlor – Tested flood alarms

- 25: Logged onto SCADA at 03:10. Tower discharging with level of 9.73. Opened valve to start filling tower upon request from oro due to water plant shutdown. Logged off SCADA 03:25
- 26: Port Burwell tower Changed hose connection where panel goes to injection hose due to connection leaking
- 27: Lakeview Changed out hose connection on panel where panel connects to injector hose due to old connection leaking

MARCH

5: Port Burwell tower - Changed start fill setpoint for port Burwell from 9.0 to 9.31M to start filling tower before today's shutdown at the waterplant.

Tower starting to fill at 4-5l/sec, valve opening at MV1. Returned fill setpoint for tower back to 9.0M.

- : MV1 and Dexter rechlor Tested flood alarms
- 6: MV1 On site for chlorine delivery
- 7: Port Burwell tower, Dexter, Lakeview rechlor Tested critical alarms
- 11: VO01, E038, Lakeview and Port Burwell tower Flowmetrix on site to calibrate flow meters
- 12: Dexter rechlor, PB02, Wanetta beach and Dexter and imperial meter chambers Flowmetrix on site to calibrate flow meters
- 13: Port Burwell tower Logged onto SCADA to check status of Port Burwell tower due to EAWTP shutdown scheduled for 05:00. Tower at 9.33 m and discharging. Altered tower fill set point at MV1 from 9.00 to 9.40m to call for tower to fill. Once in fill mode returned set point to 9.00m
- 14: Port Burwell tower Received tower plc communication alarm at 14:43. On call operator confirmed on scada did not have communication. Cycled power at tower back booth at 15:15 and did not resolve issue. Cycled power for tower at Lakeview at 15:25 and communication resolved :MV1 On site for chlorine delivery

SECOND QUARTER:

APRIL:

- 01: Found GFCI for sump pump at E038 had failed, duty OIC notified
- 02: Onsite with Koolen electric to replace GFCI at E038, unit replaced and now working properly
- 02: Port Burwell Tower, Dexter, Lakeview rechlore Tested Critical alarms
- 10: MV1- Received chlorine delivery
- 18: Repaired chlorine leak on fitting for chlorine board at Port Burwell tower, primed panel and returned back to normal operation
- 22: Completed spring hydrant flushing
- 24: Onsite at 47581 Dexter Line at chamber ARC01 with Farmington Mechanical to remove, refurbish and reinstall air relief valve

MAY:

- 22: Onsite with Farmington mechanical at chamber E015 to remove existing ARV and install new unit, later at chamber E004 removed existing ARV and installed refurbished unit
- 22: MV1- received chlorine delivery
- 28: Completed monthly critical alarm testing of Port Burwell tower, Dexter and Lakeview rechlore

JUNE:

- 12: MV1- received chlorine delivery from Jutzi
- 18: Found leak on chlorine discharge line at Dexter rechlore, cut line and installed fittings to repair leak, re pressurised system, held under pressure
- 19: Koolen Electric onsite at MV1 to replace power fuses
- 19: Onsite at lakeview rechlore after utility power restored to site from power outage, had issue with no power to chlorine pumps or analyzer, after troubleshooting contacted Hawkins Electric who found the PLC power supply box had failed, replaced unit with new one, power than restored to pumps and analyzer
- 26: Port Burwell tower, Lakeview, Dexter rechlore- completed monthly alarm testing

SECTION 7: ALARMS

FIRST QUARTER:

JANUARY

- 1: Received plc communication alarm at Port Burwell Tower 00:28. Logged into SCADA and alarm had already cleared. All appeared normal.
- 18: Received alert from call service for PLC communication failure at Port Burwell Tower. Logged onto SCADA. No alarms present in alarm banner. Phoned dialer and acknowledged alarm. All values present and refreshing. Reviewed trending. No loss of signal
- 19: Received alert from call service for PLC communication failure at Port Burwell Tower. Acknowledged alarm and logged onto SCADA. All values present and refreshing. Reviewed trending. No loss in communication
- 23: 02:10-Received notification of high Cl alarm at Dexter Re-Chlor. Residual spiked at end of chlorine pump cycle and briefly crossed 3.50mg/L from 01:43-01:47
- 27: At 18:43 received alarm for chlorine pump 1 lockout at Dexter. Logged onto SCADA at 18:46 and acknowledged alarm Reset chlorine pump 1 and alarm fault cleared Watched pump run through a few cycles
- 31: Received plc communication alarm at Port Burwell Tower 22:43

FEBRUARY

- 16: Received alert from call service for power failure at lakeview. Acknowledged alarm and logged onto SCADA. Observed hypochlorite pumps in operation. Site with power as pumps will not run on UPS power
- 19:12- Received alert from call service for UPS fault at dexter. Checked alarm banner on SCADA. Inactive. Alarm repopulated at 19:37. Hypochlorite feedback faults pump 1&2 @ 19:42. In contact with Hydro One. Team being dispatched to site. Estimated time of power restoration 22:00
- 19:18- Received alert from call service for power failure at port Burwell tower. Viewed site on SCADA. Level at 9.53 m and discharging at 8.19 l/s with a residual of 1.70ppm. In contact with Hydro One. Estimated time for power restoration 22:00
- 22:47- Received notification from call service (20:31) Port Burwell tower power now normal. Contacted by Hydro One power has been restored to Dexter Line (20:32) tower still in discharge mode. Checked on sites at 22:47. Tower now in discharge. Hypochlorite pumps running at both sites. Now normal

17:

- 05:25- Received alert from call service for power failure at Port Burwell tower as well as power failure and UPS fault alarms for Dexter. Logged onto SCADA. All alarms "out of alarm " at 05:25:27
- 06:11- Received alert from call service for UPS fault at dexter. Reviewed SCADA alarm summary. Out of alarm. In alarm from 06:09:23 to 06:09:31. Continued power flickers due to inclement weather

- 12:42- Received alerts for power failure dexter and port Burwell tower. Checked sites via SCADA. Chlorine pumps in operation at both sites. Suspected power flushed due to inclement weather 20:
- 01:28-Received notification of Dexter Re-Chlor pump 2 fault @ 00:42. Reset fault from SCADA iPad and pump returned to function. Continued to monitor pump activity for 20 min no further issues observed.
- 22: 07:44- Received notification of Port Burwell Tower PLC comm fault @ 07:41. Accessed Malahide SCADA @ 07:44
- 18:02- Received notification of PB Tower PLC comm fault @ 18:02.
- 23: Port Burwell tower Received notification of PLC comm fault at 07:05 and 15:18. Trending reviewed each time. No loss of communication

MARCH

- 11: Received alert from call service for high level alarm at Port Burwell Tower. Acknowledged and logged onto SCADA. All values present and refreshing. Reviewed trending. No loss off signal. Repeat of earlier alarm. Tower at 10.37m and discharging.
- 14: Received tower plc communication alarm at Port Burwell Tower 14:43. On call operator confirmed on scada did not have communication. Cycled power at tower back booth at 15:15 and did not resolve issue. Cycled power for tower at Lakeview at 15:25 and communication resolved.
- 19: At 08:48 received port Burwell chamber panel failure alarm. Confirmed alarm was from water treatment plant testing their generator.
- 24: Received alert from call service for power failure at valve house. In contact with EAWTP. Site was running on generator power due to power failure. Site now back on utility power.
- 31: Received alert from call service for panel power failure at valve house. Acknowledged alarm. Now inactive. Re-entered facility. Operating as intended. In contact with EAWTP. Generator not being tested at this time. Alarm due to power flicker.

SECOND QUARTER:

APRIL:

- 24: Received alarm for utility power fail at Port Burwell Tower, Enbridge performing work near by that caused power outage, once power was restored ensured all equipment is operational.
- 27: Received alarm call or UPS fault at Dexter rechlore, logged into SCADA and acknowledged alarm which cleared it, everything appears normal.
- 28: Received notification of MV1 low inlet pressure alarm, accessed SCADA, pressure spiked before dropping to 0 PSI again, spoke with Port Stanley WTP operator and was informed they were performing pressure calibrations.

MAY:

10: Received Lakeview rechlore chamber panel power fail alarm, logged onto SCADA and acknowledged alarm, site still had comms and was reading, Hydro One app showed power outage in area, once hydro was restored inspected site all appears normal.

26: Received alarm for Lakeview chamber high level, arrived onsite and chamber had pumped down, sump pump working well, now out of alarm.

JUNE:

- 08: Received alarm call for Port Burwell tower communication alarm, logged on remote SCADA to inspect, site is showing that all items are reading, relayed information to S. Gustavson for possible SCADA issue.
- 19: Received Lakeview Rechlore power fail alarm, logged onto SCADA and called dialer to acknowledge, monitored SCADA and watched chlorine pump 1 go through run cycle, arrived onsite and site still had no power, UPS was running chlorine pumps and analyzer, at 04:00 UPS died, power restored to site at 13:00.
- 19: Received Port Burwell Tower PLC alarm, logged onto SCADA and acknowledged alarm which cleared it, site still had all readings.
- 23: Received alarm call for Port Burwell Tower PLC comm fault, accessed SCADA and found no readings for site, attempted to reset from PLC but was unsuccessful, arrived at Lakeview rechlore, cycled power to PB2 modem, checked SCADA and site has restored readings.

SECTION 8: COMPLAINTS & CONCERNS

FIRST QUARTER:

There were no community complaints or concerns during the first quarter.

SECOND QUARTER:

There were no complaints or concerns reported during the second quarter.

PBSW01 Locates		
Month	# of Locates Completed	
January	1	
February	2	
March	6	
April	2	
May	0	
June	0	
July		
August		
September		
October		
November		
December		



REPORT NO. AASWSS-25-10

TO: Aylmer Area Secondary Water Supply System- Joint Board of

Management

DEPARTMENT: Public Works

MEETING DATE: September 17, 2025

SUBJECT: AYLMER AREA SECONDARY WATER SUPPLY SYSTEM – 2025

REVIEW AND PROVISION OF INFRASTRUCTURE REPORT

RECOMMENDATION:

THAT Report No. AASWSS-25-10 entitled "Aylmer Area Secondary Water Supply System – 2025 Review and Provision of Infrastructure Report" be received.

PURPOSE & BACKGROUND:

The Drinking Water Quality Management Standard (DWQMS) requires a procedure to be in place to review the adequacy of existing infrastructure on an annual basis. The review is undertaken to ensure the integrity of the drinking water system is not compromised.

The Operational Plan requires Staff to report to the Joint Board of Management, on the condition of infrastructure on an annual basis. In addition, the Operating Authority, being the Ontario Clean Water Agency (OCWA), is required to submit to the Owner the following information on an annual basis:

- Recommended maintenance to the system
- Capital and lifecycle projects
- Water quality issues that may be related to infrastructure deficiencies
- The overall condition of the water system.

COMMENTS & ANALYSIS:

Transmission Main:

On July 16, 2025, Vitaliy Talashok, of OCWA, presented Staff with the 6-year Recommended Capital and Major Maintenance spreadsheet for the Transmission main portion of the AASWSS. OCWA is also required to submit infrastructure reports based on inspections, testing, and general observations of infrastructure by the OCWA operators. Additional reports are submitted throughout the year, such as hydrant flushing, chamber and air release inspection reports, and valve operation.

This report is an overall summary of OCWA's 6-year recommended Capital and Major Maintenance for the water system. Recommendations are derived through on-site

inspections, review of maintenance records, DWQMS Risk Assessment outcomes, discussions with operations staff, and review of laboratory data.

The Malahide WWOM and OCWA Sr. Operations Manager for the transmission main met and discussed the 6-year capital recommendations before OCWA completed and provided the list to collaborate and plan for the recommendations provided in the attached OCWA 6-year Major Maintenance spreadsheet.

This review was completed early in 2025, so the budgets and 6-year financial plan for the system could be developed in preparation for the MDWL and DWWP renewal application date of October 28, 2025. The current license expires on April 28, 2026.

Attachments to this report identify the Operating Authority's recommendations for maintenance, upgrades, and replacement projects for the Joint Board of Management's consideration. This report is submitted to the Joint Board of Management to satisfy the requirements of the QEMS (Elements 14 and 15) of the AASWSS Operational Plan. This approach ensures the Owners are kept informed on the overall condition of the water system.

The following analysis and evaluation were provided:

<u>Maintenance:</u>

All equipment has been maintained as per OCWA's Work Maintenance System (WMS). OCWA replaced the Hansen WMS with Maximo in late 2017. Maximo provides an enhanced tracking and maintenance system for work completed on infrastructure equipment.

OCWA has recommended the following items for 2026:

- Apportioned cost for APAM SCADA Server and Software Upgrades- 6yr. recommended life cycle schedule for software and server upgrades (Last upgraded in 2020)
- Sample Station Maintenance Repairs (unplanned maintenance)
- Hydrant Maintenance and Repairs (unplanned maintenance)
- Summa SCADA Service Agreement

Capital Projections:

The Operating Authority has provided a 6-year capital projection spreadsheet for the transmission line.

The total six-year projection for expenditures recommended by OCWA for the transmission main is \$225,000.00. All recommendations are outlined in the attached spreadsheet. It should be noted that some of these recommended items are placeholders to be considered in future budgets as they relate to leak detection and condition assessment studies.

Overall, the system has continued to perform well. It is essential that the Joint Board of Management continues with lifecycle replacements of aging infrastructure. When the system is well maintained through preventative maintenance, it promotes increased reliability and reduces the likelihood of reactive maintenance and costly service interruptions.

Elgin Middlesex Pumping Station (EMPS):

On July 18, 2025, the Sr. Operations Managers, Greg Henderson and Nick Wilson, of OCWA, presented the Staff with the 6-year Recommended Capital and Major Maintenance spreadsheet for the EMPS portion of the AASWSS.

This report is an overall summary of the current condition of the EMPS, which includes the pumps, motors, chlorination system, SCADA system, Stand-by generator, fuel system, piping, and associated equipment. This report does not pertain to the AASWSS transmission main. A different branch of OCWA operates the transmission main.

This report is an overall summary of OCWA's 6-year Recommended Capital and Major Maintenance. Recommendations are derived through on-site inspections, review of maintenance records, DWQMS Risk Assessment outcomes, discussions with operations staff, and review of laboratory data.

The Malahide WWOM and OCWA Sr. Operations Manager's for the EMPS main met and discussed the 6-year capital recommendations before OCWA completed and provided the list to collaborate and plan for the recommendations provided in the attached OCWA 6-year Major Maintenance spreadsheet.

This review was completed early in 2025, so the budgets and 6-year financial plan for the system could be developed in preparation for the MDWL and DWWP renewal application date of October 28, 2025. The current license expires on April 28, 2026.

Attachments to this report identify the Operating Authority's recommendations for maintenance, upgrades and replacement projects for the Joint Board of Management's consideration. This report is submitted to the Joint Board of Management to satisfy the requirements of the QEMS (<u>Elements 14 and 15</u>) of the AASWSS Operational Plan. This approach ensures the Owners are kept informed on the overall condition of the water system.

The following analysis/evaluation is provided:

Maintenance:

All equipment has been maintained as per OCWA's Work Maintenance System (WMS). OCWA replaced the Hansen WMS with Maximo in late 2017. Maximo provides enhanced tracking and maintenance for work completed on infrastructure equipment. OCWA has recommended the following items for 2026 at the EMPS:

- DWQMS Audits
- Chlorine Cylinders (estimated chemical cost for re-chlorination)
- Chlorinator System Repairs (estimated contingency for annual repair costs)
- Diesel Fuel for Stand-by Generator
- Non-Identified Major Repairs (unforeseen maintenance costs)
- Pump Discharge- Physical component inspection and Measurements
- Chlorinator System Upgrades
- PLC replacement/ Version upgrades/ Purchase Spare
- Chlorine System Annual Service

Capital Projections:

The Operating Authority has provided a 6-year capital projection spreadsheet for the EMPS.

The total six-year projection for expenditures recommended by OCWA for the EMPS is \$814,500.00. There is a recommendation in 2027 for a new stand-by generator which makes for a significant amount of the projected amount noted above for the next 6 years. All recommendations are outlined in the attached spreadsheet.

Also, it should be noted that the proposed generator cost on the attached spreadsheet for EMPS has an estimated cost of \$400,000 to replace which is a 50/50 split with St. Thomas. Any chlorine system repairs or upgrades at EMPS is also a 50/50 split.

Overall, the system has continued to perform well. It is essential that the Joint Board of Management continues with lifecycle replacements of aging infrastructure at the EMPS. When the system is well maintained through preventative maintenance, it promotes increased reliability and reduces the likelihood of reactive maintenance and costly service interruptions.

FINANCIAL IMPLICATIONS:

OCWA has identified multiple recommendations for expenditures which may be required over the next six years. For 2026, they have recommended a total of \$72,000.00 in expenditures for the transmission main, and \$134,750.00 in expenditures at the EMPS. Items entered the spreadsheets attached are reviewed annually by Staff and included in current and future budgets for the Board's consideration as deemed necessary.

As noted above, any work on the chlorination system or stand-by generator is a shared cost with St. Thomas. The Aylmer Secondary and St. Thomas split this cost evenly.

ATTACHMENTS:

- 1. Transmission Main OCWA Capital Letter and 6-year Recommended Capital/ Major Maintenance Spreadsheet
- 2. EMPS OCWA Capital Letter and 6-year Recommended Capital/ Major Maintenance Spreadsheet

Prepared by: S. Gustavson, Water/Waste Water Operations Manager

Reviewed by: J. Godby, Director of Public Works

Approved by: N. Dias, Chief Administrative Officer



The Corporation of the Township of Malahide

(6-Year Recommended Capital/Major Maintenance from 2026 to 2031)

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

Ref.	Scope of Work		2026		2027		2028	20	029	2	030		2031	ompliance	WQMS RA utcome*	lealth & Safety	tepair / Aaintenance	ifecycle leplacement	nprovement	pare Parts nventory	Approved by Client	Rationale for Project
140.	Aylmer Area Secondary Water Supply System		2020		2021		2020	۷.	J2 3		030		2031	0	ПО		E 2	E		<i>o</i> =	Cileit	Rationale for Project
1	Fire Hydrant Painting	\$	-	\$	-	\$	2,000	\$	-	\$	-	\$	2,000.00								-	To be completed after fire flow testing. Completed in 2023
2	Chamber 13 (Orwell) UPS Replacement	\$	-	\$	1,500	\$	-	\$	-	\$	-	\$	1,500.00									Typical lifecycle of these UPS units are only 2-3 years. Recommend to replace every few years. This was last replaced in December 2019. Will be tested every year
3	Chamber 16 (Aylmer) UPS Replacement	\$	-	\$	1,500	\$	-	\$	-	\$	-	\$	1,500.00									Typical lifecycle of these UPS units are only 2-3 years. Recommend to replace every few years. This was last replaced in December 2019. Will be tested every year
4	SCADA server upgrades	\$5	54,000																			SCADA upgrades
5	Air release valve replacement/refurbish program (chamber 3,5,7A,8,10A,11,13,15A,16)	\$	-	\$	20,000	\$	-	\$	-	\$	-	\$										Air release valves were all replaced in 2010. Recommend to start replacing air valves in 2020 through to 2025. (In 2021, 10A, 11, 13, 15A were all refurbished in 2021). Plan is to complete rebuilds in 2022 with Chamber 16 and start again in 2026. In 2020 chamber 3, 5,7A and 8 was rebuilt.
6	Sample station #81 replacement	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-									Requires replacement of sample station #81 in 2025.
7	Sample station maintenance/repairs/rebuild kits	\$	5,000	\$	5,000	\$	5,000	\$	5,000	\$	5,000	\$	5,000									Purchase spare rebuild kits and on-going maintenance to sample stations, ball valves and plungers.
8	Hydrant Maintenance and repairs	\$	10,000	\$	10,000	\$	10,000	\$	10,000	\$	10,000	\$	10,000									Replace any failed parts discovered during annual fire hydrant flushing.
9	Chamber condition assessment and Asset ID review	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-									Recommend to undertake detailed condition assessment of all chambers and assets in 2025
10	Sample Station Painting	\$	-	\$	-	\$	2,000	\$	-	\$	-	\$	-									To maintain the exterior condition of sample stations. Completed in 2023
11	Spare PLC									\$	3,000		3,000									Costs to be shared across 4 systems.
12	Summa Service Agreement	\$	3,000	\$	3,000	\$	3,000	\$	3,000	\$	3,000	\$	3,000									Annual Service support contract
13	Leak Detection: Accoustic on water services, hydrants, valves	\$	-	\$	-	\$	-	·	25,000	\$	-	\$	-									Conduct leak detection on all services, hydrants, valves. Placeholder should unaccounted for water increases
	Total Capital Estimate	\$7	72,000	\$4	41,000	\$2	2,000	\$43	3,000	\$2:	1,000	\$2	26,000								2026	Vitaliy Talashok: Senior Operations Manager

2026 Vitaliy Talashok: Senior Operations Manager

2026 Sam Sianas: Regional Hub Manager

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

Legend:

High priority recommended to be completed in upcoming year Medium priority recommended to be completed in 1 to 3 years Low priority recommended to be completed in years 4 to 5

Page 1 of 1

07/04/25



The Corporation of the Township of Malahide

(6-Year Recommended Capital/Major Maintenance from 2026 to 2031)

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

Ref.	Scope of Work		2026	2027	2028	2	2029	-	2030		2031	Compliance	DWQMS RA Outcome*	Health & Safety	Repair / Maintenance	Lifecycle Replacement	Improvement	Spare Parts Inventory	Approved by Client	Rationale for Project
	Aylmer Area Secondary Water Supply System																		•	
1	Fire Hydrant Painting	\$	-	\$ -	\$ 2,000	\$	-	\$	-	\$	2,000.00									To be completed after fire flow testing. Completed in 2023
2	Chamber 13 (Orwell) UPS Replacement	\$	-	\$ 1,500	\$ -	\$	-	\$	-	\$	1,500.00									Typical lifecycle of these UPS units are only 2-3 years. Recommend to replace every few years. This was last replaced in December 2019. Will be tested every year
3	Chamber 16 (Aylmer) UPS Replacement	\$	-	\$ 1,500	\$ -	\$	-	\$	-	\$	1,500.00									Typical lifecycle of these UPS units are only 2-3 years. Recommend to replace every few years. This was last replaced in December 2019. Will be tested every year
4	SCADA server upgrades	\$5	54,000																	SCADA upgrades
5	Air release valve replacement/refurbish program (chamber 3,5,7A,8,10A,11,13,15A,16)	\$	-	\$ 20,000	\$	\$	-	\$	-	\$										Air release valves were all replaced in 2010. Recommend to start replacing air valves in 2020 through to 2025. (In 2021, 10A, 11, 13, 15A were all refurbished in 2021). Plan is to complete rebuilds in 2022 with Chamber 16 and start again in 2026. In 2020 chamber 3, 5,7A and 8 was rebuilt.
6	Sample station #81 replacement	\$	-	\$ -	\$ -	\$	-	\$	-	\$	-									Requires replacement of sample station #81 in 2025.
7	Sample station maintenance/repairs/rebuild kits	\$	5,000	\$ 5,000	\$ 5,000	\$	5,000	\$	5,000	\$	5,000									Purchase spare rebuild kits and on-going maintenance to sample stations, ball valves and plungers.
8	Hydrant Maintenance and repairs	\$	10,000	\$ 10,000	\$ 10,000	\$	10,000	\$	10,000	\$	10,000									Replace any failed parts discovered during annual fire hydrant flushing.
9	Chamber condition assessment and Asset ID review	\$	-	\$ -	\$ -	\$	-	\$	-	\$	-									Recommend to undertake detailed condition assessment of all chambers and assets in 2025
10	Sample Station Painting	\$	-	\$ -	\$ 2,000	\$	-	\$	-	\$	-									To maintain the exterior condition of sample stations. Completed in 2023
11	Spare PLC							\$	3,000	_	3,000									Costs to be shared across 4 systems.
12	Summa Service Agreement	\$	3,000	\$ 3,000	\$ 3,000	\$	3,000	\$	3,000	\$	3,000									Annual Service support contract
13	Leak Detection: Accoustic on water services, hydrants, valves Total Capital Estimate	· .	- 72,000	\$ - 41.000	\$ - 22,000	\$	25,000 3,000	\$	-	\$	- 26.000									Conduct leak detection on all services, hydrants, valves. Placeholder should unaccounted for water increases Vitaliy Talashok: Senior Operations Manager

2026 Vitaliy Talashok: Senior Operations Manager

2026 Sam Sianas: Regional Hub Manager

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

Legend:

H M

High priority recommended to be completed in upcoming year Medium priority recommended to be completed in 1 to 3 years Low priority recommended to be completed in years 4 to 5



Aylmer Area Secondary Water Supply System - EMPS

2025-Year Recommended Capital/Major Maintenance from 2025 to 2030)

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

Ref.									ance S RA	& Safety	ance	» ment	ment arts		
No.	Scope of Work Malahide - EMPS	2025	2026	2027	2028	2029	2030	2031	Complis DWQM	Health	Repair / Mainten	Lifecycle Replace	Improve Spare Pa	Approved by Client	Rationale for Project
1	Valve replacement program as per asset data information			\$15,000		\$20,000		\$20,000				•		•	Updates required based on finding while conducting a review of the SCADA alarms and PCN updates
2	DWQMS Audits	\$3,750	\$2,750	\$2,750	\$3,750	\$2,750	\$2,750	\$3,750	•					•	Annual Review and 3 year Re-Accreditation
3	Chlorine Cylinders (Expenditure request no longer required, direct bill)	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000		•		•			•	On-going annual cost to support operations. Shared cost with St Thomas
4	Chlorinator System (Chlorinators, Booster Pumps) Repairs	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500		•		•			•	Rebuilding/Repairs, annual repair costs. 2022 increased to cover replacement of one booster pump/motor. Shared cost with St Thomas.
5	Diesel Fuel	\$2,500	\$1,500	\$2,500	\$1,500	\$1,500	\$2,500				•			•	On-going annual cost to support operations and every second year fuel polishing in addition to fuel. Shared cost with St Thomas
6	Non Identified Major Repairs	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000				•			•	Possible equipment failures or repairs (motors, HVAC, electrical, UPS, PLC, pumps, generator engine.)
7	Generator Full Load testing every 2 years	\$2,000		\$2,000		\$2,000					•			•	Ensure proper operation under full load conditions. Shared cost with St Thomas
8	Generator & Transfer Switch Replacement including louvres			\$400,000								•		•	Generator & Transfer Switch Replacement. 2018 condition assessment indicates assets are 1995 vintage and at the end of life cycle. Note: This would be a \$500K order of magnitude shared project cost with St Thomas.
9	Surge Anticipating and Pressure Reducing inspection and rebuild			\$10,000			\$10,000				•				Annual inpsection
10	Pump Dismantle - Physical Component Inspection and Measurements		\$15,000		\$15,000			\$10,000			•			•	Dismantle pump for physical inspection to determine actual condition for future forecasting and rebuild requirements. Vibration testing in 3031
11	Chlorinator gas detection end of life - Gas detector replacement, eyewash inspection and review			\$20,000	\$10,000				•			•		•	Chlorinators replaced in 2019. 2025 is a place holder. System to be reviewed based on size requirements. Note: This would be a shared project cost with St Thomas cost based on overall system design and functionality. (Order of Magnitude on upgrade \$75 - 125K).
12	Chlorinator System Upgrade w/scales replacement		\$30,000											•	Chlorinators replaced in 2019. 2025 is a place holder. System to be reviewed based on size requirements. Note: This would be a shared project cost with St Thomas cost based on overall system design and functionality. (Order of Magnitude on upgrade \$75 - 125K).
13	PLC Replacement / Version Upgrades/Spare		\$70,000						•			•		•	10 year life cycle. (Order of Magnitude pricing). Scheduling based on replacement cycle. Reccomending complete spare with I/O and fuses
14	Update Asset Condition Report			\$10,000					•					•	Undertake an update of the 2018 asset condition report
15	VFD Replacements	\$25,000										•		•	VFD HL01 and HL02 Cooling Fan and Capacitor Replacement
16	Painting - piping, pumps, valves	\$5,000											•	•	
17	Chlorine and Pressure Analyzer Upgrade				\$20,000				•					•	
18	London/Aylmer By-pass Header Gate Valve Actuator Repalcement						\$30,000					•		•	

Page 1 of 2



Aylmer Area Secondary Water Supply System - EMPS

2025-Year Recommended Capital/Major Maintenance from 2025 to 2030)

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

Ref.									nce S RA	& Safety	ance nent	nent irts		
No.	Scope of Work	2025	2026	2027	2028	2029	2030	2031	Complia DWQM§	Health	Maintena Maintena Lifecycle Replacer	Improver Spare Pa Inventor	Approved by Client	Rationale for Project
19	Chlroine System Annual Service	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000		•				•	
20	Owner Requests												•	Owner requested capital works.
	Total Capital Estimate	\$53,750	\$134,750	\$477,750	\$65,750	\$41,750	\$60,750	\$33,750				<u> </u>		

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

Legend:

H M

High priority recommended to be completed in upcoming year Medium priority recommended to be completed in 1 to 3 years Low priority recommended to be completed in years 4 to 5



Client approval deferred pending review of asset ownership and responsibilities as defined by the new Joint Occupancy & Use Agreement.

Note: No recommendations put forth based on possible ownership transfers

2025 Recommended Capital Presented by: Greg Henderson, Sr. Operations Manager

2025 Recommended Capital Approved by:Sam Gustavson, Water/Waste Water Operations Manager



REPORT NO. PBASWSS-25-07

TO: Port Burwell Area Secondary Water Supply System - Joint Board of

Management

DEPARTMENT: Public Works

MEETING DATE: September 17, 2025

SUBJECT: PORT BURWELL AREA SECONDARY WATER SUPPLY SYSTEM –

2025 REVIEW AND PROVISION OF INFRASTRUCTURE REPORT

RECOMMENDATION:

THAT Report No. PBASWSS-25-07 entitled "Port Burwell Area Secondary Water Supply System – 2025 Review and Provision of Infrastructure Report" be received.

PURPOSE & BACKGROUND:

The Drinking Water Quality Management Standard (DWQMS) requires a procedure to be in place to review the adequacy of the existing infrastructure on an annual basis. The review is undertaken to ensure that the integrity of the drinking water system is not compromised.

The Operational Plan requires the Staff to report to the Joint Board of Management on the condition of infrastructure on an annual basis. In addition, the Operating Authority, being the Ontario Clean Water Agency (OCWA), is required to submit to the Owner (being the Joint Board of Management) on an annual basis, the following information:

- Recommended maintenance to the system
- Capital and lifecycle projects
- Water quality issues that may be related to infrastructure deficiencies
- The overall condition of the water system.

COMMENTS & ANALYSIS:

On July 16, 2025, Vitaliy Talashok, of OCWA, presented the Staff with the 6-year Recommended Capital and Major Maintenance spreadsheet. OCWA is also required to submit infrastructure reports based on inspections, testing, and general observations of infrastructure by the OCWA operators. Additional reports are submitted throughout the year, such as hydrant flushing, chamber and air release inspection reports, and valve operations.

This report is an overall summary of OCWA's 6-year recommended Capital and Major Maintenance for the water system. Recommendations are derived through on-site inspections, review of maintenance records, DWQMS Risk Assessment outcomes,

discussions with operations staff, and review of laboratory data. OCWA does not provide condition/recommendations for physical structures such as the Port Burwell Tower, Lakeview Re-chlorination, Dexter Re-chlorination, and MV1, as it is outside of their scope.

The Malahide WWOM and OCWA Sr. Operations Manager met and discussed the 6-year capital recommendations before OCWA completed and provided the list to collaborate and plan for the recommendations provided in the attached OCWA 6-year Major Maintenance spreadsheet.

This review was completed early in 2025, so the budgets and 6-year financial plan for the system could be developed in preparation for the MDWL and DWWP renewal application date of October 3, 2025. The current license expires on April 3, 2026.

Attachments to this report identify the Operating Authority's recommendations for maintenance, upgrades, and replacement projects for the Joint Board of Management's consideration. This report is submitted to the Joint Board of Management to satisfy the requirements of the QEMS (<u>Elements 14 and 15</u>) of the PBASWSS Operational Plan. This approach ensures that the Owners are kept informed on the overall condition of the water system.

The following analysis/evaluation is provided:

Maintenance:

All equipment has been maintained as per OCWA's Work Maintenance System (WMS). OCWA replaced the Hansen WMS with Maximo in late 2017. Maximo provides an enhanced tracking and maintenance system for work completed on infrastructure equipment.

<u>Facilities:</u> (MV1, Dexter Line Re-chlorination, Port Burwell Tower, Lakeview Re-chlorination:

OCWA has recommended the following items for 2026:

- Spare inventory for chemical feed system (pumps, injectors, Chlorine probes, backpressure valves, prv's, pH probes, tubing, fittings)
- Replace UPS batteries as required
- Water Tower- Drain, clean, inspect, internal coating repairs- following recommendations from Landmark ROV inspection completed in 2023 (Port Burwell Water Tower Inspection and Cathodic Protection Survey Report PBASWSS-23-10)
- Apportioned cost for APAM SCADA Server and Software Upgrades- 6yr. recommended life cycle schedule for software and server upgrades (Last upgraded in 2020)
- Ladder Inspection at Water tower
- Summa SCADA Service Agreement

- Repair and Test Cathodic Protection System- Replace reference electrodes in tank at same time tank is drained, cleaned, repaired and inspected- following recommendations from Landmark ROV inspection completed in 2023 (Port Burwell Water Tower Inspection and Cathodic Protection Survey Report PBASWSS-23-10)
- Install S.S. D-Ring at Bottom of Water Tower Catwalk
- Replace 4 pc. Corrodible D-Rings with S.S Type at Water Tower
- Hydrant Maintenance and Repairs (unplanned maintenance)
- Sample Station Maintenance Repairs (unplanned maintenance)
- Chamber Maintenance (drain, air release, metering, isolation)

Capital Projections:

The Operating Authority has provided a 6-year capital projection spreadsheet for the transmission line.

The total six-year projection for expenditures recommended by OCWA for the transmission main is \$562,842.00. All recommendations are outlined in the attached spreadsheet. It should be noted that some of these recommended items are placeholders to be considered in future budgets as they relate to condition assessment studies.

Overall, the system has performed well with significant improvements over the past few years. It is essential that the Board continues with lifecycle replacements of aging infrastructure. When the system is well maintained through preventative maintenance, it promotes increased reliability and reduces the likelihood of reactive maintenance and costly service interruptions.

FINANCIAL IMPLICATIONS:

OCWA has identified multiple recommendations for expenditures which may be required over the next six years. For 2026, they have recommended a total of \$164,642.00 in capital and repair expenditures. Items entered into the spreadsheet attached are reviewed annually by the Staff and included in current and future budgets for the Board's consideration if deemed necessary.

ATTACHMENTS:

 Port Burwell Secondary: 2026 OCWA 6-year Recommended Capital/ Major Maintenance Spreadsheet

Prepared by: S. Gustavson, Water/Waste Water Operations Manager

Reviewed by: J. Godby, Director of Public Works

Approved by: N. Dias, Chief Administrative Officer



The Corporation of the Township of Malahide: Port Burwell Area Secondary Water Supply System

(6-Year Recommended Capital/Major Maintenance from 2026 to 2031)

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

															fety	d	یا	Ħ			
Ref.													8	¥ ¥	Sa	000	mer	mer	S arts		
													bla Bla	SWS	- % - €	li li	ycle	ove.	e P.		
No. On the office of the other	203	00		2007		0000		2000		2030		2031	E	W of	<u>a</u>	- B - E	ilec	ğ	par	Approved by	Pottomole for Protect
No. Scope of Work MV1. Valvehouse	202	26	- 4	2027		2028		2029		2030		2031	၁		Ι.	₩ 2		-	SE	Client	Rationale for Project
	Ι.		Ι.		Ι.												_			•	Recommend to undertake detailed condition assessment of all chambers
Facility Condition Assessment and Asset Review	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-									and buildings in 2025.
2 Main line pressure regulating valve PRV (flow control valve): Rebuild of valve	\$	-	\$	8,000	\$	-	\$	-	\$	-	\$	8,000.00									Recommend to undertake detailed inspection/servicing/rebuild of PRV in 2028. Rebuilted in 2022
3 Replace PLC UPS batteries	\$	1,500	\$	-	\$	1,500	\$	-	\$	1,500.00	\$	-									Required every 2-3 years. Prevents PLC from losing power due to battery failure. Replacement to be completed in 2025.
Total Estimate - Recommended Capital	\$1.5	500	\$8	8.000	\$	8.000		\$0	\$	1.500	\$	8.000									Tanale. Replacement to so completed in 2020.
Dexter Line Re-Chlorination Facility				-,																	
1 Facility Condition Assessment and Asset Review	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-									Recommend to undertake detailed condition assessment of all chambers and buildings in 2025.
Spare inventory for chemical feed system (pumps, injectors,																					and buildings in 2020.
2 chlorine probes, backpressure valves, prv's, pH probes, tubing,	\$	5,000	\$	5,000	\$	5.000	\$	5,000	\$	5,000	\$	5,000									Brand new chlorine system. Requires spare parts on the shelf.
fittings																					
3 Replace PLC UPS batteries	\$	-	\$	1,500	\$	-	\$	-	\$	1,500.00	\$	-									Required every 2-3 years. Prevent PLC from losing power due to battery failure. Original from 2016.
Total Estimate - Recommended Capital		\$5.000		\$6,500		\$5,000		\$5,000		\$6,500		\$5,000									Tomar G. Original (1911) 2010.
Port Burwell Tower			_		_		_		_		_					_					
1 Interior coatings touch up/ROV Inspection	\$.	40,000	\$	-	\$	-	\$	-	\$	-	\$	-									Perform ROV Inspection and repair of Port Burwell Tower.
2 Replace heaters in building underneath tower	\$	-	\$	-	\$		\$	-	\$	3,500	\$	-									Heater Placeholder for replacement as needed
3 Replace PLC UPS batteries	\$		\$		\$	1,500	\$		\$	_	\$	_									Required every 2-3 years. Prevents PLC from losing power due to battery
· ·	1 *		T		· .	·			*	_	Ψ					-					failure. Plan is to be replaced in 2020.
4 Storage/workshop: internal works	\$		\$	-	\$	1,000	\$	-	\$	-	\$	-				+					Storage building installed 2020. Internal upgrades as required.
5 SCADA server upgrades	\$72,000						Φ.		Ι	ı	Φ.		_	-	-	+	_		_		SCADA upgrates
Water Tower Inspection with potential Anode Installation Ladder Inspection	\$	3,000	\$	3,000	\$	3,000	\$	3,000	\$	3.000	φ	3.000	_	+	-	+	+	-			5 Year Inspection of Tower with consideration for Anode installation Recommend it to do every year
8 Spare PLC	\$	3,000	\$	-	Φ.	3,000	\$	-	Φ	3,000	Φ Φ	3,000	_	_	_	+		_			
9 Summa Service Agreement		3,000	Ψ	3,000	Φ.	3.000	Φ	3,000	Φ	3,000	Φ Φ	3,000		+	-	+	+	_			Spare PLC to be shared across 4 systems. Annual Service Agreement for support.
10 Install dehumidifier in valve pit, direct drain to valve pit	\$		\$		\$	-	4	950			\$	-		+	-	+	+	_			Per Landmark 2023 Recommendations
11 Increase height of catwalk handrail from 36" to 42"	\$		\$		\$		\$	27,500		-	\$		_	+		+	+	_			Per Landmark 2023 Recommendations
12 Remove and replace non-compliant rungs from catwalk	\$	-	\$	-	\$		\$	20.000			\$	-		_		+		_			Per Landmark 2023 Recommendations
13 Relocate hinges on roof hatch	\$	-	\$	-	\$	-	\$	750		-	\$	-									Per Landmark 2023 Recommendations
14 Pepair & Test Cathodic Protection, replace anode	\$ 1	10,642	\$	-	\$	-	\$		\$		\$										Per Landmark 2023 Recommendations
15 Remove existing fall arrest system and replace with CSA system	\$	-			\$	-	\$	-	\$	-	\$	-									Per Landmark 2023 Recommendations
16 Install S.S. 'D' ring at bottom of ladder to catwalk	\$	1,500	\$	-	\$	-	\$	-	\$	-	\$	-									Per Landmark 2023 Recommendations
17 Replace 4 pc corrodible 'D' rings with S.S. type	\$	3,000	\$	-	\$	-	\$	-	\$	-	\$	-									Per Landmark 2023 Recommendations
18 Water Tower Power Wash			\$	30,000	\$	-	\$	-	\$	-	\$	-									Recommend to power wash tower to remove and build-up and maintain costing life expectancy.
Total Estimate - Recommended Capital	\$1:	.33,142		\$36,000		\$8,500		\$55,200		\$12,500		\$9,000									
Lakeview Re-Chlorination Facility																					
1 Facility Condition Assessment and Asset Review/Roof Repair	\$		\$	-	\$	12,500	\$	-	\$	-	\$	-									Recommend to undertake detailed condition assessment of all chambers and buildings in 2025. Roof was copleted in 2023.
2 Replace PLC UPS batteries	\$	-	\$	-	\$	1,500	\$	-	\$	1,500.00	\$	-									Required evey 2-3 years. Prevents PLC from losing power due to battery failure. Batteries purchased in 2020.
3 Replace building exhaust fan	\$		\$	2,500	\$	-	\$	-	\$	-	\$	2,500.00									Possible replacement of building exhaust fan in 2020. Original fan will be approximately 10 years old in 2020.
Total Estimate - Recommended Capital		\$0		\$2,500		\$14,000		\$0		\$1,500		\$2,500	_								
Transmission Main																					



The Corporation of the Township of Malahide: Port Burwell Area Secondary Water Supply System

(6-Year Recommended Capital/Major Maintenance from 2026 to 2031)

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

Ref.										mpllance	/QMS RA tcome*	alth & Safety	pair / iintenance	ecycle placement	provement	are Parts entory	Approved by	
No.	Scope of Work	2026		2027	2028	20	029	2030	2031	00	0 PV	운	Re Ma	F 5	Ē	S F	Client	Rationale for Project
1	Chamber Condition Assessment and Asset Review	\$	- \$	50,000	\$ -	\$	-	\$ -	\$ -									Condition assessment on app 50 chambers along tranmission main
2	Leak Detection	\$	- \$	-	\$ -	\$	-	TBD	TBD									Leak Detection scheduled shound unaccounted for water percentage increase.
3	Hydrant maintenance and repairs, painting and numbering	\$ 10,000	\$	10,000	\$ 10,000	\$	10,000	\$ 10,000	\$ 10,000									Replace any failed parts discovered during annual fire hydrant flushing . Was painted in 2023, will do it in 2028
4	Sample Station maintenance, repairs, rebuild kits, painting	\$ 5,000	\$	5,000	\$ 5,000	\$	5,000	\$ 5,000	\$ 5,000									Purchase spare rebuild kits and on-going maintenance to sample stations, ball valves and plungers.
5	Sample Station Replacement	\$ -	\$	-	\$ 7,000	\$	7,000	\$ 7,000	\$ 7,000									Replacement of sample stations 90, 91, and 92
6	Air Release Valve Servicing/Replacement	\$	- \$	-	\$ -	\$	-	\$ -	\$ -									Air valve maintenance program
7	Chamber maintenance (drain, metering, isolation)	\$ 10,000	\$	10,000	\$ 10,000	\$	10,000	\$ 10,000	\$ 10,000									Refer to excel spreadsheet for asset inventory and history of work completed and required on all chambers from MV1 through to E038 including new Dexter Line. Example of work includes replacement of air release valves, flowmeters, chamber work etc
	Total Estimate - Recommended Capital	\$25,000)	\$75,000	\$32,000	;	\$32,000	\$32,000	\$32,000									
	Total Capital Estimate	\$164,642	2	\$128,000	\$67,500	:	\$92,200	\$54,000	\$56,500				2025	Recomn	nended	Capital P	resented by:	Vitaliy Talashok: Senior Operations Manager

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

Legend:

High priority recommended to be completed in upcoming year Medium priority recommended to be completed in 1 to 3 years Low priority recommended to be completed in years 4 to 5

2025 Recommended Capital Presented by: 2025 Recommended Capital Approved by:

Vitaliy Talashok: Senior Operations Manager Sam Sianas: Regional Hub Manager



REPORT NO. AASWSS-25-08

TO: Joint Management Board

DEPARTMENT: Corporate & Financial Services

MEETING DATE: September 17, 2025 SUBJECT: 2026 Draft Budget

RECOMMENDATION:

THAT Report No. AASWSS-25-08, being the 2026 Draft Budget, be received;

AND THAT the 2026 Budget be approved as presented;

AND THAT the 2026 water rate, in the amount of 1.544 per cubic metre, be approved;

AND THAT the Township's 2026 to 2031 Water Financial Plan be approved as presented;

AND THAT staff be authorized to carry out the administrative acts necessary to implement the 2026 Draft Budget, including the submission of the 2026-2031 Water Financial Plan to the Ministry of Municipal Affairs and Housing for drinking water licence renewal.

PURPOSE & BACKGROUND:

The Aylmer Area Secondary Water Supply System (AASWSS) currently supplies water to metered connections in the municipalities of Central Elgin (Eastern Area), Malahide (East and West of Aylmer), and the Town of Aylmer. The AASWSS purchases water from the Elgin Area Primary Water Supply System (EAPWSS), which draws its supply from Lake Erie.

The system is fully metered at each municipal boundary and operates on a rate structure that applies a per cubic metre volume charge, ensuring that costs are allocated fairly among the partnering municipalities based on consumption. A history of current and recent volume rates is provided in the subsequent table.

In 2023, the Board approved the AASWSS Water Rate Study prepared by Watson and Associates, which established a long-term financial plan based on updated operating and capital forecasts. The study provided recommended water rates and outlined a capital funding strategy to support the sustainable replacement of system assets over the planning horizon.

	Rate Histo	ory
Year	Billing	Change
	Rate	(%)
2026*	1.5440	5.75%
2025	1.4600	3.50%
2024	1.4100	3.50%
2023	1.3622	3.50%
2022	1.3161	4.00%

*Subject to Board approval

The 2026 Draft Budget reconsiders the 2023 Rate Study in light of new information and refined financial estimates. While the long-term framework from the study continues to guide financial planning, this year's budget introduces adjustments that deviate from the original recommendations. Specifically, the 2026 Draft Budget incorporates revised rate recommendations, reflects adjustments arising from an altered procedure for water loss billing, and establishes a new funding target for capital contributions to support asset replacement.

In addition, the system's 2026–2031 Financial Plan, based on long-term budget forecasting and prepared in accordance with the requirements for Drinking Water Licence approval, is attached to this report for consideration.

COMMENTS & ANALYSIS:

The 2026 Draft Budget recommends a 2026 water rate of 1.544 per cubic metre to fund the system's gross annual operating budget of \$2,394,250 and annual lifecycle costs of \$550,750. A summary of AASWSS's annual costs is provided below.

2	2026 Draft Operatin	g Budget	
	2025 Budget	2025 Forecast	2026 Budget
Annual Operating Costs			
Water Purchases	1,827,000	1,863,000	1,952,000
EMPS	168,500	154,500	163,300
Insurance	20,000	13,600	14,000
OCWA	119,900	130,000	133,900
System Repairs	60,000	30,000	60,000
Wages	51,300	51,300	52,300
Other	21,300	17,820	18,750
Total	2,268,000	2,260,220	2,394,250
Annual Revenues			
Water Billing	2,580,000	2,555,000	2,735,000
Investment Income	183,000	248,000	245,000
Total	2,763,000	2,803,000	2,980,000
Lifecycle Funding	495,000	542,780	550,750

2023 Rate Study Deviations

The 2026 Draft Budget includes the following deviations from the financial planning guidelines set out in the 2023 Water Rate Study. The rationale for each adjustment is provided further below.

1. Water Loss Billing

In March 2024, correspondence was issued to the Board recommending that water loss volumes no longer be apportioned to the member municipalities, but instead be absorbed by the Board. At the Board's direction, staff reviewed and subsequently revised the billing procedures in response to this request.

The Board's revenue is a function of billable volumes and the system rate. As this process change reduced billable volumes, the rate needs to increase to generate the same level of revenue required to maintain a balanced budget.

This revised billing methodology was first applied to the 2024 year-end, resulting in an unplanned credit issued to member municipalities of \$125,589, representing 89,070 cubic metres. This variance will continue to recur and increase annually unless water consumption estimates are updated within the Board's annual operating budget. Accordingly, the 2026 Draft Budget includes an adjustment to the system rate to account for an estimated three percent water loss.

It should be noted that this adjustment results in a one-time increase in the 2026 water rate. However, the overall volume of water being billed to member municipalities is lower under this methodology, which has partially offset the financial impact for members' municipal drinking water systems. While the 2026 system rate is proposed to increase by 5.75%, the overall cost to member municipalities is expected to rise by approximately 3.75%. The report later provides further details on the assumptions regarding consumption and water purchases for 2026, which underpin this adjustment.

2. Asset Replacement Costs

In November 2024, correspondence was submitted to the Board expressing concerns about the Board's ability to fund the long-term replacement of its transmission main. In response, staff reviewed the capital funding strategy outlined in the 2023 Rate Study prepared by Watson and Associates. The results of this review are summarized in Attachment B, which refines the earlier strategy and establishes a revised annual reserve funding target for the Board's consideration.

The updated funding model recommends annual contributions of \$579,834, excluding investment income. Current contributions, as reflected in the 2025 budget, total \$312,000. To close this gap by the end of the study period in 2032, and consistent with the overall intent of the 2023 Rate Study, the Board would need to raise an additional

\$267,834 in annual capital funding over the next seven years, representing an average annual increase of \$42,726.

To provide a structured path to achieving this target, staff have modelled a phase-in strategy under which contributions increase by a consistent percentage each year from 2026 to 2032. Because contributions are phased in rather than reaching the full target immediately, investment income will be lower than assumed in the original sinking fund model. As a result, further rate adjustments beyond 2032 may still be required, subject to confirmation through future rate studies.

This revision represents a slight deviation from the long-term funding recommendations of the 2023 Watson report. While the original study assumed average annual rate increases of 3.5 percent, the updated funding model requires an average increase of 3.75 percent over the forecast period.

The Board may also choose to deviate from the proposed phase-in schedule, extending the period over which contributions rise. Such an approach would result in a higher overall contribution target being reached at a later date. Should the Board wish to consider this option, staff can provide alternative scenarios for review upon request.

2026 Budget Details

Purchases of Treated Water

Purchases of treated water from the Elgin Area Primary Water Supply System (EAPWSS) remain the largest single cost driver for the AASWSS, accounting for approximately 71 percent of total system costs. In 2024, metered usage at the municipal boundaries totaled 1,758,365 cubic metres. Year-to-date figures for 2025 are trending lower. For 2026, the budget estimates 1,771,573 cubic metres of metered usage, plus an additional three percent allowance for water loss, resulting in a total purchase volume estimate of 1,824,720 cubic metres.

The 2026 Draft Budget also incorporates the impact of a 3.5 percent rate increase from the EAPWSS, which accounts for the majority of this year's budget adjustments. Based on the EAPWSS's approved multi-year budget, the primary billing rate is assumed to increase by 3.5 percent annually until 2027, followed by 3.0 percent annually thereafter.

Motor Volumes	202	24	20	25	2026
Water Volumes	Budget	Actual	Budget	Forecast	Budget
Demand Volume (m ³)	1,763,116	1,758,365	1,767,250	1,749,700	1,771,573
Unbilled Water Loss	0	89,070	0	52,491	53,491
Purchase Volume (m ³)	0	1,847,435	1,767,250	1,802,191	1,824,720
EAPWSS Rate (\$/m³)	0.9988	0.9988	1.0337	1.0337	1.0700
Water Purchases (\$)	1,761,000	1,845,000	1,827,000	1,863,000	1,952,000

Annual Revenues

Based on the 2026 consumption estimate of 1,771,573 cubic metres and the recommended system rate of \$1.544 per cubic metre, annual revenues are projected to total approximately \$2,735,000, which balances the draft budget. The recommended 2026 rate has been set with two primary objectives: to fund an increase of \$1,250 in non-water purchase operating costs, and to continue the phase-in of asset replacement reserve contribution targets as outlined in the updated capital funding strategy.

Water Volumes	20	24	20	25	2026
water volumes	Budget	Actual	Budget	Forecast	Budget
Demand Volume (m ³)	1,763,116	1,768,500	1,767,250	1,749,250	1,771,573
Billing Rate (m ³)	1.41	1.41	1.46	1.46	1.544
Water Billings (\$)	2,486,000	2,632,400	2,580,000	2,555,000	2,735,000

Elgin-Middlesex Pumping Station (EMPS)

The Elgin-Middlesex Pump Station at the Elgin Terminal Reservoir houses the pumps, piping, control systems, pressure surge controls and associated piping related secondary pumping systems for the City of London, the St. Thomas Secondary Water System, and the Aylmer Secondary Water System. The Elgin Board recently agreed to own and maintain the common building and building-related assets and entered into a long-term Joint Use and Occupancy Agreement with the secondary water systems and the City of London. The agreement established a fee for occupancy on a square meter basis. AASWSS's 2025 occupancy is \$46,400. EAPWSS retains this fee in a dedicated reserve fund which is utilized for the maintenance and repair of the building and building-related assets. The cost of operating its pumps and associated equipment within the EMPS continues to be the responsibility of AASWSS.

The Elgin Area Primary Water System bills AASWSS for its proportionate use of booster stations within the EMPS. A fixed fee is charged for the operation and maintenance of the booster stations. Utilities costs, primary electricity, are charged based on AASWSS's proportionate flows. These costs can vary year to year depending on hydro rates and flows.

Staff have noted that prior year costs associated with the EMPS have typically fallen below budget estimates. For 2025, the EMPS budget is recommended to remain static to reduce the potential for unwanted future surpluses and to provide capacity in this year's budget to allocate resources to higher priority discretionary budgets such as system maintenance and lifecycle contributions.

Ontario Clean Water Agency (OCWA) Operations Contract

The Ontario Clean Water Agency (OCWA) and the AASWSS entered into agreements effective 2023 to 2027 whereby OCWA is to provide for the management, operations and maintenance services of the secondary system's water facilities. In accordance with

the agreement, OCWA charges AASWSS a fixed monthly fee which is adjusted by CPI at the end of each year. Services provided beyond the terms of the agreement are charged at an additional cost. An allowance is included in the budget to account for such costs.

Insurance

The 2026 Draft Budget reflects a reduction in insurance costs resulting from changes to the Board's coverage. Staff transitioned the Board's policy to Marsh Canada and, through coordination with OCWA's coverage and the Elgin-Middlesex Pumping Station (EMPS) coverage, were able to align policies and secure efficiencies. These adjustments provided improved coverage terms while maintaining sufficient protection for the system, and have resulted in reduced overall premiums.

System Repairs & Maintenance

Staff are not recommending an increase to AASWSS's allowance for system repairs and maintenance this year. Average annual system repairs and maintenance costs from 2022 to 2025 are projected to be approximately \$30,000. The 2026 Draft Budget includes an allotment of \$60,000. Unused funds are distributed to reserves to fund future capital replacement.

Wages

As the administrator of the secondary system, Township of Malahide staff recover a portion of their costs for time spent on ASSWSS activities. The majority (70%) of labour costs relate to the Manager of Water & Wastewater Operations. The Township's Director of Public Works, Treasurer, Public Works Coordinator and Finance Clerk also support the ongoing operations of the AASWSS. Wages have been indexed by 2% for 2026.

Other Costs

Approximately 1% of costs relate to the SCADA system, a computer-based system for gathering and analyzing real-time data to monitor and control equipment, an annual financial audit by an independent third-party auditor, and miscellaneous supplies as required by staff.

Capital Budget

Ontario Clean Water Agency (OCWA) provides operation, maintenance and management services for the Board's water facilities and systems. Each year, staff receive capital and maintenance forecasts from OCWA, which, along with estimates of other inflationary pressures provided by staff, are used to formulate the annual draft

capital budget for the Board's consideration. AASWSS's average annual capital cost between 2026 to 2031 is approximately \$98,167.

Staff note that OCWA has recommended replacement of the EMPS generator and transfer switch in 2027 at an estimated cost of \$400,000, to be shared equally with St. Thomas, representing a significant upcoming capital project.

With average annual capital funding of \$729,725 over the same period, AASWSS is well-positioned to build its reserves at a rate that will be sufficient to fund the eventual replacement of its assets.

ATTACHMENTS:

Attachment A - 2026 Draft Budget Schedules

Attachment B - Asset Funding Model

Attachment C - 2026 - 2031 Financial Plan

Prepared by: A. Boylan, Director of Corporate Services/Treasurer

Approved by: N. Dias, Chief Administrative Officer

Aylmer Area Secondary Water Supply System | Operating Budget

			Prior Years			Current	t Yea r
	202			2025		202	
	Budget	Actual	Budget	Forecast	Variance	Budget	Change
<u>Expenses</u>							
Purchase of Water	\$1,761,000	\$1,845,033	\$1,827,000	\$1,863,000	-\$36,000	\$1,952,000	\$125,000
EMPS Operations	\$188,500	\$173,414	\$168,500	\$154,500	\$14,000	\$163,300	-\$5,200
Insurance	\$20,000	\$20,022	\$20,000	\$13,600	\$6,400	\$14,000	-\$6,000
OCWA Operations Contract	\$92,600	\$96,646	\$119,900	\$130,000	-\$10,100	\$133,900	\$14,000
System Repairs & Maintenance	\$60,000	\$30,441	\$60,000	\$30,000	\$30,000	\$60,000	\$0
Wages	\$51,300	\$51,300	\$51,300	\$51,300	\$0	\$52,300	\$1,000
Software (SCADA)	\$14,500	\$10,149	\$14,500	\$12,520	\$1,980	\$12,750	-\$1,750
Audit Fees	\$6,300	\$5,265	\$6,300	\$5,300	\$1,000	\$5,500	-\$800
Miscellaneous	\$500	\$0	\$500	\$0	\$500	\$500	\$0
Total Expenses	\$2,194,700	\$2,232,270	\$2,268,000	\$2,260,220	\$7,780	\$2,394,250	\$126,250
Capital Costs	\$23,500	\$7,469	\$40,000	\$0	\$40,000	\$96,000	\$56,000
Revenue							
Water Billings	\$2,486,000	\$2,479,295	\$2,580,000	\$2,555,000	\$25,000	\$2,735,000	\$155,000
Investment Income	\$57,000	\$270,994	\$183,000	\$248,000	-\$65,000	\$245,000	\$62,000
Total Revenue	\$2,543,000	\$2,750,289	\$2,763,000	\$2,803,000	-\$40,000	\$2,980,000	\$217,000
Reserve Transfers							
Contributions to Reserves	\$348,300	\$348,300	\$495,000	\$495,000	\$0	\$585,750	\$90,750
Less: Capital Costs	-\$23,500	-\$7,469	-\$40,000	\$0	-\$40,000	-\$96,000	-\$56,000
Operating Surplus	\$0	\$169,719	\$0	\$47,780	-\$47,780	\$0	\$0
Net Reserve Transfer	\$324,800	\$510,550	\$455,000	\$542,780	-\$87,780	\$489,750	\$34,750
Net Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0

60

Aylmer Area Secondary Water Supply System | Budget Forecast

	Current		F	uture Years		
	2026	2027	2028	2029	2030	2031
<u>Expenses</u>						
Purchase of Water	\$1,952,000	\$2,026,000	\$2,084,000	\$2,157,000	\$2,224,000	\$2,300,000
EMPS Operations	\$163,300	\$165,600	\$168,800	\$172,100	\$175,500	\$179,000
Insurance	\$14,000	\$14,300	\$14,600	\$14,900	\$15,200	\$15,500
OCWA Operations Contract	\$133,900	\$136,600	\$139,300	\$142,100	\$144,900	\$147,800
System Repairs	\$60,000	\$64,900	\$64,900	\$70,200	\$70,200	\$70,200
Wages	\$52,300	\$53,300	\$54,300	\$55,400	\$56,500	\$57,600
SCADA	\$12,750	\$12,900	\$13,100	\$13,300	\$13,500	\$13,700
Audit Fees	\$5,500	\$5,500	\$5,500	\$5,500	\$5,500	\$5,500
Miscellaneous	\$500	\$500	\$500	\$500	\$500	\$500
Total Expenses	\$2,394,250	\$2,479,600	\$2,545,000	\$2,631,000	\$2,705,800	\$2,789,800
Capital Costs	\$154,000	\$275,000	\$45,000	\$45,000	\$40,000	\$30,000
Revenue						
Water Billings	\$2,735,000	\$2,860,000	\$2,962,000	\$3,088,000	\$3,208,000	\$3,341,000
Investment Income	\$245,000	\$270,900	\$293,500	\$333,400	\$378,100	\$428,600
Total Revenue	\$2,980,000	\$3,130,900	\$3,255,500	\$3,421,400	\$3,586,100	\$3,769,600
Reserve Transfers						
Contributions to Reserves	\$585,750	\$651,300	\$710,500	\$790,400	\$880,300	\$979,800
Less: Capital Costs	-\$154,000	-\$275,000	-\$45,000	-\$45,000	-\$40,000	-\$30,000
Net Reserve Transfer	\$431,750	\$376,300	\$665,500	\$745,400	\$840,300	\$949,800
Net Total	\$0	\$0	\$0	\$0	\$0	\$0
Projected Water Rates	1.544	1.602	1.662	1.724	1.789	1.856
Projected Water Rate Increase (%)	5.75%	3.75%	3.75%	3.75%	3.75%	3.75%

Aylmer Area Secondary Water Supply System | Capital Budget

	Current	Future Years				
Capital Projects	2026	2027	2028	2029	2030	2031
Valve replacements	\$0	\$15,000	\$0	\$20,000	\$0	\$20,000
Generator & transfer switch replacement including louvres	\$0	\$200,000	\$0	\$0	\$0	\$0
Surge anticipating and pressur reducing inspection and rebuild	\$0	\$10,000	\$0	\$0	\$10,000	\$0
Pump dismantle - physical component inspection and measurements	\$15,000	\$0	\$15,000	\$0	\$0	\$10,000
Chlorinator gas detector replacement	\$0	\$20,000	\$10,000	\$0	\$0	\$0
Chlorinator system upgrade with scales replacement	\$15,000	\$0	\$0	\$0	\$0	\$0
Air release valve replacement/refurbishments	\$0	\$20,000	\$0	\$0	\$0	\$0
Leak detection (acoustic detection)	\$0	\$0	\$0	\$25,000	\$0	\$0
PLC Replacement	\$70,000	\$0	\$0	\$0	\$0	\$0
SCADA server/software upgrade	\$54,000	\$0	\$0	\$0	\$0	\$0
Asset condition update report	\$0	\$10,000	\$0	\$0	\$0	\$0
Chlorine and pressure analyzer upgrade	\$0	\$0	\$20,000	\$0	\$0	\$0
By-pass header gate valve actuator replacement	\$0	\$0	\$0	\$0	\$30,000	\$0
Total Capital Costs	\$154,000	\$275,000	\$45,000	\$45,000	\$40,000	\$30,000
Reserves						
Opening Reserve Balance	\$4,083,256	\$4,515,006	\$4,891,306	\$5,556,806	\$6,302,206	\$7,142,506
Add: Contributions to Reserves	\$585,750	\$651,300	\$710,500	\$790,400	\$880,300	\$979,800
Less: Capital Costs	-\$154,000	-\$275,000	-\$45,000	-\$45,000	-\$40,000	-\$30,000
Closing Reserve Balance	\$4,515,006	\$4,891,306	\$5,556,806	\$6,302,206	\$7,142,506	\$8,092,306

ASSET FUNDING MODEL

1.1 Lifecycle Investment Strategy

The Aylmer Area Secondary Water Supply System (AASWSS) follows a reserve-based funding strategy for capital infrastructure. Under this approach, annual contributions to reserves are made through the system's rate, with the intention of building up funds over time. These reserves are invested while not in use, generating income that is reinvested into the system. When significant capital works are required, such as the replacement of the transmission main, those reserves are drawn down to finance the expenditure without resorting to sharp rate increases or debt.

This approach is consistent with the strategy outlined in the 2023 Rate Study, which similarly emphasized the use of gradual reserve accumulation to fund long-term capital needs. It remains the preferred model for maintaining rate stability and reducing reliance on external financing.

The strategy is analogous to a pension model: regular contributions are made during periods of lower need, in order to accumulate the resources required for larger, planned future obligations. The philosophy behind this approach is rooted in fairness and long-term financial sustainability. By gradually building reserves while the current infrastructure is in service, the cost of replacing that infrastructure is shared by those who are benefiting from it. This helps avoid deferring financial burdens to future users who may not have received the same benefit from the system.

1.2 Debt Financing Option

The AASWSS does not have the authority to issue debt in its own name. Instead, the Board must rely on financing arrangements coordinated through its participating municipalities.

The Transfer Order that governs the Board provides the legal basis for such arrangements. Specifically, Section 20 of the Transfer Order states:

"In the event the Joint Board proposes a capital or other expenditure not otherwise provided for, it may arrange for one or more municipalities to finance the expenditure and shall provide in the Joint Board's future budgets for the repayment of such financing."

While this provides a mechanism for addressing capital needs that exceed reserve balances, it shifts borrowing responsibility to the member municipalities. Any debt issued would appear on each municipality's consolidated balance sheet and apply against mandated annual debt repayment limits imposed by the Province.

If such an approach is considered, it must be carefully coordinated with the Town of Aylmer, as any borrowing would count proportionately against the Town's debt capacity limit and could constrain its ability to fund its own initiatives.

Although this model remains available, it is not the recommended strategy. Reserve-based capital planning continues to be the preferred approach, offering more stability, transparency, and long-term financial sustainability.

1.3 Reserve Funding Option (the Sinking Fund Method)

The sinking fund model is a financial planning method utilized in the 2023 Rate Study to determine the target level of annual contributions required to fully fund the future replacement of the system's assets. It is based on the principle that predictable, regular contributions, when invested at a consistent rate of return, can accumulate sufficient funds to meet long-term infrastructure needs.

Under this model, each asset's replacement cost is indexed into the future using an assumed rate of inflation. Using the remaining service life of the asset and an assumed rate of investment return, the model then calculates the annual amount that must be set aside so that, by the end of the asset's life, the reserve will equal the inflated replacement cost.

The formula combines both inflation and investment return to estimate the necessary annual contribution:

$$Annual\ Contribution = \left[Replacement\ Cost \times (1 + Inflation\ Rate)^{Years\ Remaining} \right] \times \left[\frac{Investment\ Rate}{(1 + Investment\ Rate)^{Years\ Remaining} - 1} \right]$$

The 2023 Rate Study applied the following assumptions to calculate an annual reserve contribution target:

- Aggregate Asset Replacement Cost: \$15,755,650
- Inflation rate: 2% annually
- Investment rate of return: 2% annually

As a result, the annual contribution to reserves target was calculated at \$469,757.

1.4 Evaluation of Reserve Contribution Targets

The 2023 Rate Study provides a solid foundation for long-term capital planning through the application of the sinking fund model. However, as with any financial model, the accuracy of the outputs depends heavily on the assumptions used. Upon further review, there are several opportunities to refine the model to better reflect current market conditions, updated cost estimates, and the financial position of the Board.

The following sections identify specific areas where adjustments to the model's inputs could improve the reliability of the reserve contribution target and ensure that it more accurately aligns with the Board's long-term funding requirements.

1.4.1 Asset Replacement Costs

As part of this rate study update, the estimated cost to replace the AASWSS transmission main has been revised to reflect current market conditions and project-specific complexities. The transmission main consists of approximately 13,800 metres of 450 mm PVC watermain. Based on current pricing, it is now assumed that a full replacement would cost approximately \$3,000 per metre, inclusive of design, engineering, and contingency allowances, for a total estimated project cost of \$41.4 million.

This estimate represents a substantial increase from the \$11 million figure included in the 2023 Rate Study. For context, in 2020, the Township of Malahide replaced a section of tertiary watermain on Highway 3 at a cost of approximately \$2,000 per metre. However, staff are of the opinion that a higher unit cost is appropriate for the AASWSS transmission main, due to its complexity. In particular, the project would require significant coordination with the Ministry of Transportation of Ontario (MTO) to obtain approvals, as well as carefully planned staging to ensure uninterrupted water service to the Town of Aylmer. As the Town is not on a looped system, it cannot rely on alternative supply sources while the main is out of service.

To support the revised estimate, staff also consulted with representatives of other water distribution systems, who provided comparable pricing for similar large-scale pipeline reconstruction projects. These benchmarks helped reinforce the assumption that a \$3,000 per metre cost is a reasonable basis for planning.

While the actual cost of replacement cannot be known with certainty at this stage, the revised estimate is considered by staff to be a prudent and reasonable planning assumption that better reflects the likely scope and complexity of the project. Updating this figure within the rate model ensures that future reserve contributions are aligned with a more realistic financial obligation.

Asset Replacement Costs – Watermains							
2023 Rate Study 2026 Budget Change							
Water Mains (13,800' 450mm PVC)	11,119,150	41,400,000	30,280,850				
Total	11,119,150	41,400,000	30,280,850				

1.4.2 Inflationary Estimates

The study applies a 2% annual inflation rate to project future capital costs. While this rate aligns with general CPI trends, it does not reflect actual escalation in municipal infrastructure construction costs. When anomalies are removed, the Non-Residential Building Construction Price Index (NRBCPI) shows a historical average of approximately 3.5% annually. Applying this revised inflation rate would better capture the real cost pressures facing municipal water systems and ensure that reserve contributions remain adequate over the long term.

1.4.3 Rate of Return on Investments

While there is merit in adopting conservative assumptions for investment income, the current model effectively assumes no real investment return, as the 2% investment rate used is equal to the 2% inflation rate. This approach neutralizes any compounding benefit of investing and implies that reserve contributions offer no financial advantage over simple inflation tracking. In reality, the Board has the capacity to generate long-term investment income in excess of inflation.

A portfolio-wide return of approximately 6% is a reasonable and attainable benchmark, particularly when balancing capital preservation vehicles such as bonds and GICs with a diversified equity component. Over long horizons, this balanced investment strategy can produce returns that materially reduce the required annual reserve contributions while still maintaining capital security.

Importantly, the most significant replacement cost in the system relates to the transmission main, which is not expected to require replacement for another 67 years. This provides a long investment window during which compound returns can substantially offset future capital requirements. These gains would apply not only to future contributions but also to the Board's existing reserve balance, further strengthening the AASWSS' long-term funding position.

1.4.4 Treatment of Existing Reserves

The current model does not incorporate the Board's existing reserve balance, which is projected to reach approximately \$3.5 million by the end of 2025. This omission is particularly notable given that the sinking fund formula relies on the remaining useful life of the asset, rather than its total lifespan. By using only the years remaining until replacement, the 2023 Rate Study sinking fund formula implicitly assumes that no funds have been set aside to date. As a result, the magnitude of the Board's existing reserve position has no bearing on the calculated annual contribution, even if substantial.

Ultimately, the Board is interested in ensuring that the target reserve contribution is sufficient to meet asset replacement demands by the time those expenditures are expected to occur. Therefore, using the remaining useful life of the asset while explicitly incorporating the existing reserve balance, apportioned to the future value of asset replacement costs, is the appropriate methodology to ensure the reserve model aligns with actual funding needs.

1.4.5 Multi-Year Capital Plan

The 2023 Rate Study assumed that any capital project scheduled within the 10-year planning horizon would be funded directly from the Board's existing reserves and, as such, was excluded from the sinking fund-based reserve contribution calculation. This updated analysis adopts the same approach. However, it is important to note that capital costs expected to occur within the 10-year window should be appropriately inflated to the year of anticipated implementation, rather than being valued at current dollars. To improve the accuracy of these estimates, this update applies a 3.5% annual inflation rate to escalate projected capital costs to their expected year of implementation.

10 Year Capital Projection							
	Year	2022 Study	2026 Budget				
EMPS Surge Elimination Valve	2029	22,030	24,425				
EMPS Surge Elimination Valve Upgrade	2031	24,190	28,730				
EMPS Rechlorination System	2030	83,120	95,382				
Air Drain Chambers - Mechanical/Eletrical/I&C	2031	534,350	634,640				
Boundary Meters - Mechanical/Eletrical/I&C	2031	127,230	151,109				
Other Meters - Mechanical/Electrical/I&C	2029	68,860	76,346				
Other Meters-Mechanical/Electrical/I&C-Display Units	2032	20,720	25,470				
SCADA	2030	462,250	530,443				
Hydrant	2030	32,610	37,421				
Hydrant	2033	0	10,369				
Total		1,375,360	1,614,335				

1.5 Revised Reserve Contribution Targets

As of the end of 2025, it is estimated that the AASWSS will have approximately \$3.5 million in available reserves. Of this total, \$1,614,335 has been earmarked to fund capital projects identified within the 10-year capital plan, as detailed in the above table.

This leaves a remaining reserve balance of approximately \$1.89 million available to be applied toward longer-term infrastructure replacement needs. To align with full-cost recovery principles, this remaining balance has been apportioned proportionately across the system's long-term asset categories based on each asset's share of the total future replacement value.

The required reserve contributions have then been recalculated using the sinking fund methodology, incorporating the following refinements:

- Updated asset replacement costs, including revised estimates for the transmission main;
- 3.5% annual inflation applied to escalate future capital costs to the year of anticipated replacement;
- 6% annual investment return, reflecting a more realistic long-term rate of return for a diversified municipal investment portfolio;
- Remaining useful life for each asset based on the most recent inventory data; and
- Inclusion of existing reserve balances, applied at future value to offset long-term funding requirements.

A detailed breakdown of the revised reserve contribution target is provided in the table below.

Revised Reserve Contribution Target							
	Years To Replacement	Current Replacement Cost	Current Value in Reserves	Target Reserve Contribution			
Transmission Main	67	41,400,000	1,848,212	399,105			
EMPS Structural	40	1,187,400	20,939	28,985			
EMPS Mechanical	12	1,140,200	7,674	101,214			
Air Drain Chambers - Civil/Structural	17	534,350	4,271	33,583			
Boundary Meters - Civil Structural	17	127,230	1,017	7,996			
Other Meters - Civil/Structural	33	248,220	3,440	7,694			
Hydrant	11	8,150	53	788			
Hydrant	17	7,440	59	468			
Total		44,652,990	1,885,665	579,834			

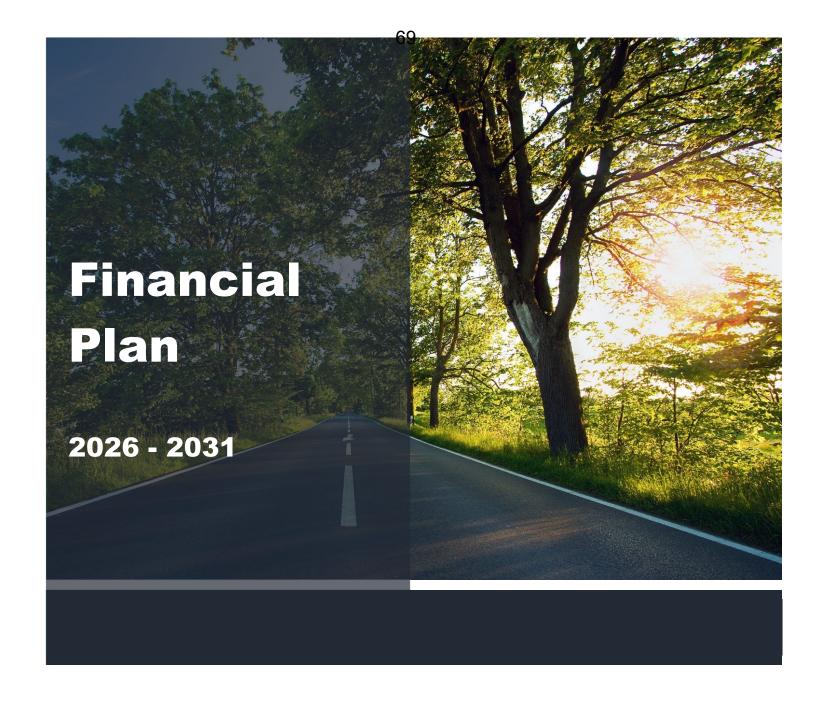
The revised target contribution to reserves is \$579,834 annually, up from the 2023 Rate Study estimate of \$469,757. This amount reflects the required annual contribution <u>excluding</u> investment income, as the sinking fund model already assumes returns will accumulate over time. This marks a change in approach from the 2023 Rate Study, which included investment income in the contribution target, resulting in double-counting the effect of investment income. Based on the 2025 Budget, the current contribution, excluding investment income, is \$312,000, meaning an additional \$267,834 annually would be required to fully fund the AASWSS's long-term capital needs.

1.6 Post Forecast Period Rate Adjustments

Similar to the 2023 rate study, the sinking fund method assumes contributions at the annual target level of \$579,834 will begin immediately, as the compounding investment earnings in the model rely on this time to accumulate. The 2023 rate study, however, recommended a 10-year phase-in of contributions to gradually reach the target. This approach introduces a funding delay that will result in lower cumulative investment earnings than otherwise considered in the model.

As a result, additional rate adjustments beyond the forecast period will be required in order to meet long-term funding requirements. The size of these post-forecast adjustments will depend on the pace of the phase-in and can be quantified through future rate studies. For example, a more gradual phase-in, such as adopting lower rate increases in the early years of the forecast period, will result in a larger loss of investment income and therefore require a larger adjustment to contributions beyond the forecast period.

Ultimately, the decision to phase in rates reflects a balance between long-term cost recovery and short-term affordability. However, it is important for the Board to recognize that this approach shifts part of the financial burden to years beyond the forecast period. Continued monitoring and recalibration of reserve contributions through future rate studies will be essential to ensure that the system remains adequately funded and resilient against future capital demands.



Aylmer Area Secondary Water Supply System

September, 2025

FINANCIAL PLAN (O.REG 453/07)

To obtain a municipal drinking water licence, the Safe Drinking Water Act, 2002, requires the development a 6-year financial plan which provides a forecast of the financial needs of its drinking water system. Ontario regulation 453/07 requires the financial plan be approved through a resolution of council, submitted to the Ministry of Municipal Affairs and Housing six months prior to licence expiration.

Ontario regulation 453/07 further prescribes the format and details contained within water financial plans. The Aylmer Area Secondary Water Supply System's 2026 – 2031 Water Financial Plan conforms with these requirements as well as Canadian Institute of Chartered Accountants Public Sector Accounting Standards. The financial information contained within this plan is organized in a way that demonstrates compliance with the Aylmer Area Secondary Water Supply System's legislative requirements.

Financi	al Plan Contents O.Reg. 453/07 s.3
Section 1	Details of the proposed financial position of the drinking water system itemized by: i) total financial assets ii) total liabilities iii) net assets/debt iv) non-financial assets including changes in tangible capital assets
Section 2	Details of the proposed financial operations of the drinking water system itemized by: i) total revenues, further itemized by water rates, user charges and other revenues ii) total expenses, further itemized by amortization expenses, interest expenses and other expenses iii) annual surplus or deficit iv) accumulated surplus or deficit
Section 3	Details of the drinking water system's proposed gross cash requirements and gross cash payments itemized by: i) Operating ii) Capital iii) Investing iv) Financing v) Net changes in cash and cash equivalents vi) Cash and cash equivalents at the beginning and end of the year

Note: This financial plan is not an audited document and contains various estimates. All financial information contained herein is for financial planning purposes only.

SECTION 1: STATEMENT OF FINANCIAL POSITION

Purpose: provides information that describes how the Aylmer Area Secondary Water Supply System's assets, liabilities, and accumulated surplus are expected to change over the forecast period.

Table 1 - Statement of Financial Position								
	Note	2026	2027	2028	2029	2030	2031	
Net Financial Assets	(1)							
Cash		320,915	327,740	334,899	347,055	353,468	364,155	
Investments		3,970,178	4,329,230	4,979,070	5,701,814	6,525,702	7,453,738	
Accounts Receivable		455,833	476,667	493,667	514,667	534,667	556,833	
Less: Trade Payables		(231,920)	(242,330)	(250,830)	(261,330)	(271,330)	(282,420)	
		4,515,006	4,891,306	5,556,806	6,302,206	7,142,506	8,092,306	
Non-Financial Assets	(2)							
Tangible Capital Assets		3,432,109	3,564,793	3,475,602	3,375,161	3,293,966	3,207,989	
		3,432,109	3,564,793	3,475,602	3,375,161	3,293,966	3,207,989	
Accumulated Surplus/(Deficit)		7,947,115	8,456,099	9,032,408	9,677,367	10,436,47	11,300,29	

(1) Net Financial Assets

Net financial assets is defined as the difference between financial assets and liabilities. A net financial asset position is where financial assets are greater than liabilities. A net financial asset position implies that the system currently has the resources to finance its operations. Table 1 indicates the Aylmer Area Secondary Water Supply System's water system will be in a net financial asset position that is expected to grow from \$4.5 million to approximately \$8.1 million by 2031. Table 1.1 below further details the Aylmer Area Secondary Water Supply System's expected change in net assets. The Aylmer Area Secondary Water Supply System is expected to generate revenues in excess of annual operating costs and amortization, the estimated degradation of existing assets, as a mean to build reserves for future infrastructure replacement. The Aylmer Area Secondary Water Supply System's water system is currently in good condition and no significant asset acquisitions are expected over the forecast period.

	2026	2027	2028	2029	2030	2031
Net Financial Assets, Opening	4,083,256	4,549,006	4,921,506	5,566,906	6,300,106	7,102,506
Change in Net Financial Assets						
Annual Surplus/(Deficit)	446,684	505,184	556,209	632,759	721,204	833,323
Less: Asset Acqusitions	(85,000)	(245,000)	(30,000)	(20,000)	(40,000)	(20,000)
Add: Amortization of Assets	104,066	112,316	119,191	120,441	121,196	105,977
Net Change in Financial Assets	465,750	372,500	645,400	733,200	802,400	919,300
Net Financial Assets, Closing	4,549,006	4,921,506	5,566,906	6,300,106	7,102,506	8,021,806

(2) Tangible Capital Assets

Under Public Sector Accounting Board (PSAB) standards, tangible capital assets are considered to be physical assets that are used in the production or supply of goods and services, have a useful life extending beyond a single reporting period, and are not intended for sale in the ordinary course of operations. Unlike asset management planning which measures assets in terms of future replacement cost, tangible capital assets under PSAB rules are measured at their historical purchase price or construction cost.

The Aylmer Area Secondary Water Supply System's water system utilizes tangible capital assets in the following categories:

- I. Watermains
- II. Hydrants
- III. Booster Stations
- IV. Sample Stations
- V. SCADA and PLC Equipment
- VI. Meters

Tangible capital assets are meausred by their net book value, that being the historical cost of an asset less any accumulated amortization over its useful life. Amortization reflects the consumption of of an asset's economic benefits over its useful life. The Aylmer Area Secondary Water Supply System calculates amortization based on the straight-line approach with half-year amortization applied in the year of acquisition or construction and in the last year of the asset's useful life.

Table 1.2 below shows tangible capital assets are expected to decline by approximately \$224,000 over the 6-year forecast period. This indicates that the Aylmer Area Secondary Water Supply System's capital investments over the forecast period are exceeded by the estimated degredation of existing infrastrurcture.

The balance of tangible capital assets is summarized as follows:

Table 1.2 - Tangible Capital Assets									
	2026	2027	2028	2029	2030	2031			
<u>Historical Cost</u>									
Opening Balance	6,384,255	6,469,255	6,714,255	6,744,255	6,764,255	6,804,255			
Acqusitions/(Disposals)	85,000	245,000	30,000	20,000	40,000	20,000			
Closing Balance	6,469,255	6,714,255	6,744,255	6,764,255	6,804,255	6,824,255			
Accumulated Amortization									
Opening Balance	2,933,080	3,037,146	3,149,462	3,268,653	3,389,093	3,510,289			
Amortization Expense	104,066	112,316	119,191	120,441	121,196	105,977			
Closing Balance	3,037,146	3,149,462	3,268,653	3,389,094	3,510,289	3,616,266			
Net Book Value	3,432,109	3,564,793	3,475,602	3,375,161	3,293,966	3,207,989			

SECTION 2: STATEMENT OF OPERATIONS

Purpose: the Statement of Operations summarizes the revenues and expenses generated by the water system for a given period.

Table 2: Statement o	Table 2: Statement of Operations									
	Note	2026	2027	2028	2029	2030	2031			
Revenues										
Billing Revenue	(3)	2,735,000	2,860,000	2,962,000	3,088,000	3,208,000	3,341,000			
Investment Earnings		245,000	270,900	293,500	333,400	378,100	428,600			
		2,980,000	3,130,900	3,255,500	3,421,400	3,586,100	3,769,600			
Expenses										
Operating Costs	(4)	2,463,250	2,509,600	2,560,000	2,656,000	2,705,800	2,799,800			
Amortization	(2)	104,066	112,316	119,191	120,441	121,196	105,977			
		2,567,316	2,621,916	2,679,191	2,776,441	2,826,996	2,905,777			
Annual Surplus/(Deficit)	(5)	412,684	508,984	576,309	644,959	759,104	863,823			
Accumulated Surplus/(Deficit)	(6)									
Reserves		4,515,006	4,891,306	5,556,806	6,302,206	7,142,506	8,092,306			
Tangible Capital Assets		3,432,109	3,564,793	3,475,602	3,375,161	3,293,966	3,207,989			
Total Acc. Surplus/(Deficit)		7,947,115	8,456,099	9,032,408	9,677,367	10,436,472	11,300,295			

(3) Billing Revenue

The Aylmer Area Secondary Water Supply System (AASWSS) operates under a system rate established by the Board, which is charged to its municipal members in accordance with the governing transfer order. Member municipalities, in turn, recover these costs from end users through their respective tertiary systems. Moderate growth is forecasted for the system, with an assumed water loss of 3 percent to be absorbed by the secondary system. The rate structure is based solely on a constant volume rate. Water demand is expected to increase from approximately 1.77 million cubic metres in 2026 to 1.81 million cubic metres in 2031, although actual demand may vary significantly depending on growth patterns, which are reviewed and monitored annually.

(4) Operating Costs

Projected operating costs for the Aylmer Area Secondary Water Supply System (AASWSS) are shown in Table 2.1. These costs reflect the ongoing purchase of treated water, including forecasted rate increases for purchases from the Elgin Area Primary Water Supply System, as well as operation and maintenance of pump stations, the operations contract with OCWA, routine system repairs, SCADA system support, and administrative expenses. The forecast incorporates expected inflationary pressures together with scheduled maintenance activities, and forms the basis for establishing the system rate charged to member municipalities.

Table 2.1 Operating Costs											
	2026	2027	2028	2029	2030	2031					
Purchases of Treated Water	1,952,000	2,026,000	2,084,000	2,157,000	2,224,000	2,300,000					
Pump Station Operations	163,300	165,600	168,800	172,100	175,500	179,000					
OCWA Contract	133,900	136,600	139,300	142,100	144,900	147,800					
System Repairs	129,000	94,900	79,900	95,200	70,200	80,200					
SCADA System	12,750	12,900	13,100	13,300	13,500	13,700					
Administrative	72,300	73,600	74,900	76,300	77,700	79,100					
Total	2,463,250	2,509,600	2,560,000	2,656,000	2,705,800	2,799,800					

(5) Annual Surplus/(Deficit)

Annual surpluses generated by the Aylmer Area Secondary Water Supply System (AASWSS) are intended to support the lifecycle replacement of system assets. Using a sinking fund model to calculate long-term replacement costs, it is estimated that annual reserve contributions of \$579,834, net of investment income, are required to achieve full cost recovery of infrastructure. The secondary system's multi-year budget has been designed to gradually reach this contribution level by 2032.

The annual surplus or deficit measures whether revenues are sufficient to cover current-year operating costs and, in turn, whether net financial assets have been maintained or depleted. As shown in Table 2, the system is forecasted to generate an annual surplus in each year of the projection period, with the surplus growing to \$863,823 by 2031. These surpluses are critical to ensuring funds are available to support the long-term financial sustainability of the system.

(6) Accumulated Surplus/(Deficit)

An accumulated surplus indicates that the available net resources are sufficient to provide future water services. An accumulated deficit indicates that resources are insufficient to provide future services and that borrowing or rate increases are required to finance annual deficits. Table 2, the financial plan proposes to add approximately \$3.35 million over the forecast period. This accumulated surplus is comprised of reserve funding for future infrastructure replacement as well as historical investments in tangible capital assets.

SECTION 3: STATEMENT OF CASH FLOW

The Statement of Cash Flow summarizes how the Aylmer Area Secondary Water Supply System's water system is expected to generate and use cash resources during the forecast period. The transactions that provide/use cash are classified as operating, capital, investing, and financing activities as shown in Table 3 below. This statement focuses on the cash aspect of these transactions and thus is the link between cash and accrual-based reporting. Table 3 indicates that annual net positive cash flow from operations will be used to acquire investments and finance capital investments. This aligns with the Aylmer Area Secondary Water Supply System's strategy to build its reserves and generate investment income on those reserves over time to mitgate the financial impact of infrastructure replacement on ratepayers. The table also indicates capital acquisitions over the forecast period will be financed through operating cash flows as opposed to external financing.

Table 3: Statement of Cash	Flows					
	2026	2027	2028	2029	2030	2031
Opening Cash Balance	295,161	320,915	327,740	334,899	347,055	353,468
Operating						
Annual Surplus/(Deficit)	412,684	508,984	576,309	644,959	759,104	863,823
Add: Amortization of Assets	104,066	112,316	119,191	120,441	121,196	105,977
Change in Accounts Receivable	(30,000)	(20,833)	(17,000)	(21,000)	(20,000)	(22,167)
Change in Accounts Payable	15,000	10,410	8,500	10,500	10,000	11,090
Net Operating Cash Flow	501,750	610,877	687,000	754,900	870,300	958,723
Capital						
Asset Acquisitions	(85,000)	(245,000)	(30,000)	(20,000)	(40,000)	(20,000)
Net Capital Cash Flow	(85,000)	(245,000)	(30,000)	(20,000)	(40,000)	(20,000)
Investments						
Investment Acquisitions	(390,996)	(359,052)	(649,841)	(722,744)	(823,888)	(928,036)
Net Investment Cash Flow	(390,996)	(359,052)	(649,841)	(722,744)	(823,888)	(928,036)
Financing						
Add: Debt Issuance Proceeds	-	-	-	-	-	-
Less: Debt Repayment	-	-	-	-	-	-
Net Financing Cash Flows	-	-	-	-	-	-
Net Change in Cash Flow	25,754	6,825	7,159	12,156	6,413	10,687
Closing Cash Balance	320,915	327,740	334,899	347,055	353,468	364,155



REPORT NO. PBASWSS-25-08

TO: Joint Management Board

DEPARTMENT: Corporate & Financial Services

MEETING DATE: September 17, 2025

SUBJECT: 2026 Draft Budget and Financial Plan

RECOMMENDATION:

THAT Report No. PBASWSS-25-08, being the Draft 2026 Budget, be received;

AND THAT the 2025 Budget be approved as presented;

AND THAT the 2025 water rate, in the amount of 3.91 per cubic metre, be approved;

AND THAT the Township's 2026 to 2031 Water Financial Plan be approved as presented;

AND THAT staff be authorized to carry out the administrative acts necessary to implement the 2026 Draft Budget, including the submission of the 2026-2031 Water Financial Plan to the Ministry of Municipal Affairs and Housing for water drinking licence renewal.

PURPOSE & BACKGROUND:

The Port Burwell Area Secondary Water Supply System (PBASWSS) currently supplies water to approximately 1,469 metered connections in the municipalities of Central Elgin, Malahide, and Bayham. The PBASWSS purchases water from the Elgin Area Primary

Water Supply System (EAPWSS), which draws its water from Lake Erie. The secondary system consists of approximately 31.3 km of transmission mains, a water tower, and two chlorination facilities.

The system is fully metered at each municipal boundary and operates on a rate structure that applies a per cubic metre volume charge, ensuring that costs are allocated fairly among the partnering municipalities based on consumption. A history of current and recent volume rates is provided in the subsequent table.

Rate History								
Year	Billing	Change						
	Rate	(%)						
2026*	3.91	7.5%						
2025	3.64	5.0%						
2024	3.47	5.0%						
2023	3.30	4.3%						
2022	3.15	4.1%						

*Subject to Board approval

In 2023, the Board approved the PBASWSS Water Rate Study prepared by Watson and Associates, which established a long-term financial plan based on updated operating and capital forecasts. The study provided recommended water rates and outlined a capital funding strategy to support the sustainable replacement of system assets over the planning horizon.

The 2026 Draft Budget reconsiders the 2023 Rate Study in light of new information and refined financial estimates. While the long-term framework from the study continues to guide financial planning, this year's budget introduces an adjustment that deviates from the original recommendations. Specifically, the 2026 Draft Budget incorporates revised rate recommendations that reflect an adjustment arising from an altered procedure for water loss billing.

In addition, the system's 2026–2031 Financial Plan, based on long-term budget forecasting and prepared in accordance with the requirements for Drinking Water Licence approval, is attached to this report for consideration.

COMMENTS & ANALYSIS:

The 2026 Draft Budget recommends a 2026 water rate of 3.91 per cubic metre to fund the system's gross annual operating budget of \$599,900 and annual lifecycle costs of \$610,100. A summary of PBASWSS's annual costs is provided below.

	2026 Draft Operatin	g Budget	
	2025 Budget	2025 Forecast	2026 Budget
Annual Operating Costs			
Water Purchases	280,000	289,000	310,000
OCWA Contract	96,800	110,000	112,200
System Repairs	62,500	30,000	57,500
Wages	45,400	45,400	46,300
SCADA	26,800	25,700	26,800
Other Costs	48,100	43,474	47,100
Total	559,600	543,574	599,900
Annual Revenues			
Water Billing	987,000	951,400	1,060,000
Investment Earnings	148,900	206,000	150,000
Total	1,135,900	1,157,000	1,210,000
Lifecycle Funding	576,300	589,726	610,100

2023 Rate Study Deviation

1. Water Loss Billing

In March 2024, correspondence was issued to the Joint Board of Management recommending that water loss volumes no longer be apportioned to the member municipalities, but instead be absorbed by the Board. At the Board's direction, staff reviewed and subsequently revised the billing procedures in response to this request.

The Board's revenue is a function of billable volumes and the system rate. As this process change reduced billable volumes, the rate needs to increase to generate the same level of revenue required to maintain a balanced budget. This revised billing methodology was first applied to the 2024 year-end, resulting in an unplanned credit issued to member municipalities of \$56,495, representing 16,281 cubic metres. This variance will continue to recur and increase annually unless water consumption estimates are updated within the Board's annual operating budget. Accordingly, the 2026 Draft Budget includes an adjustment to the system rate to account for an estimated nine percent water loss.

It should be noted that this adjustment results in a one-time increase in the 2026 water rate. However, the overall volume of water being billed to member municipalities is lower under this revised billing methodology, which has partially offset the financial impact for members' municipal drinking water systems. While the 2026 system rate is proposed to increase by 7.5%, the overall cost to member municipalities is expected to rise by approximately 5%. The report later provides further details on the assumptions regarding consumption and water purchases for 2026, which underpin this adjustment.

2026 Budget Details

Purchase of Treated Water

Purchases of treated water from the Elgin Area Primary Water Supply System (EAPWSS) account for approximately 26 percent of total system costs. In 2024, metered usage at municipal boundaries totaled 259,678 cubic metres. Year-to-date figures for 2025 are trending on par at an estimated 261,374 cubic metres by the end of the year. For 2026, the budget estimates of metered usage, plus an additional seven percent allowance for water loss, result in a total purchase volume estimate of 18,970 cubic metres.

The 2026 Draft Budget also incorporates the impact of a 3.5 percent rate increase from the EAPWSS. Based on the EAPWSS's approved multi-year budget, the primary billing rate is assumed to increase by 3.5 percent annually until 2027, followed by 3.0 percent annually thereafter.

Matax Valuesas	202	24	20	2026	
Water Volumes	Budget	Actual	Budget	Forecast	Budget
Demand Volume (m ³)	270,000	259,678	271,215	261,374	271,000
Unbilled Water Loss	0	16,281	0	18,288	18,970
Purchase Volume (m³)	270,000	275,959	271,215	279,552	289,970
EAPWSS Rate (\$/m³)	0.9988	0.9988	1.0337	1.0337	1.0700
Water Purchases (\$)	270,000	275,600	280,000	289,000	310,000

Annual Revenues

Based on the 2026 consumption estimate of 271,000 cubic metres and the recommended system rate of \$3.91 per cubic metre, annual revenues are projected to total approximately \$1,060,000, which balances the draft budget. The recommended 2026 rate has been set with two primary objectives: first, to fund an increase of \$10,300 in non-water purchase operating costs; and second, to offset the impact of rising non-residential construction prices, estimated at 3.5 percent annually, while continuing build annual reserve contributions for asset replacement. In the short-term, these increases serve to build the Board's financial capacity fund anticipated annual debt servicing costs when significant capital costs are incurred.

Water Volumes	20	24	20	2026	
water volumes	Budget	Actual	Budget	Forecast	Budget
Demand Volume (m ³)	270,000	259,678	271,215	261,264	271,000
Billing Rate (m ³)	3.47	3.47	3.64	3.64	3.91
Water Billings (\$)	937,000	901,083	987,000	951,000	1,060,000

Ontario Clean Water Agency (OCWA) Operations Contract

The Ontario Clean Water Agency (OCWA) and the PBASWSS entered into an agreement effective from 2023 to 2027 whereby OCWA provides management, operations, and maintenance services for the secondary system's water facilities. Under this agreement, OCWA charges the PBASWSS a fixed monthly fee, subject to annual CPI adjustment, while services provided beyond the contract terms are billed as additional costs and accounted for in the budget. As OCWA callouts for repairs are similarly coded to this budget area, a reallocation of \$5,000 from the repairs and maintenance budget is recommended for 2026.

Insurance

The 2026 Draft Budget reflects a reduction in insurance costs during 2025, resulting from changes to the Board's insurance provider. Staff transitioned the Board's policy to Marsh Canada and, through coordination with OCWA's coverage, were able to better align policies and secure some minor cost efficiencies. These adjustments provided some cost savings while still maintaining sufficient protection for the system.

System Repairs & Maintenance

Staff are recommending an adjustment to PBASWSS's allowance for system repairs and maintenance to reflect a \$5,000 reallocation toward OCWA callouts, which are coded to the same budget area. Average annual system repairs and maintenance costs from 2022 to 2025 are projected to be approximately \$49,500. Accordingly, the 2026 Draft Budget reduces the allocation for system repairs and maintenance to \$57,500, with the reallocated \$5,000 set aside to cover anticipated OCWA callout costs.

Wages

As the administrator of the secondary system, Township of Malahide staff recover a portion of their costs for time spent on PBASWSS activities. The majority (70%) of labour costs relate to the Manager of Water & Wastewater Operations. The Township's Director of Public Works, Treasurer, Public Works Coordinator and Finance Clerk also support the ongoing operations of the PBASWSS. Overall, wage costs for the secondary system continue to be less than the cost of a single full-time employee.

Other Costs

Approximately 2% of costs relate to the SCADA system, a computer-based system for gathering and analyzing real-time data to monitor and control equipment, an annual financial audit by an independent third-party auditor, and miscellaneous supplies as required by staff.

Transmission Main Replacement and Interim Funding Strategy

For 2026, staff estimate that the costs previously approved by the Board in the amount of \$1,097,000 to design the replacement of the transmission main will be incurred during the year, drawing significantly upon reserves to do so. The replacement of a 7-kilometre section of watermain is currently projected for 2028, although its final cost cannot be confirmed until the design work is completed.

Staff note that the 2023 Rate Study significantly underestimated both the timing and cost of this replacement project. As a result, the long-term funding targets established under the study's sinking fund methodology are not considered accurate by staff. Until more reliable costing information is available from the design process, it is recommended that the Board focus on funding the interim replacement of the watermain section identified for 2028, and temporarily set aside any objective of fully funding the system's long-term lifecycle needs. Based on current costing, it is unlikely that the PBASWSS could independently fund full system replacement without substantial support from senior levels of government.

At a high level, the financial strategy for the transmission main replacement will involve drawing down reserves to a minimal sustainable level. Staff recommend that some reserve funding be retained to fund ongoing operating expenses and contingencies. It is

projected that the Board will have an opening reserve balance of \$3.6 million in 2028, enabling a recommended \$2.6 million to be applied toward the watermain construction cost, with the balance to be debt financed.

Based on Infrastructure Ontario lending rates of 4.39 percent for a 30-year loan, annual debt servicing costs are estimated at \$442,472. Contributions that are presently being directed to reserves will instead be redirected to cover these costs, thereby preventing a significant spike in the system rate. Following completion of the project, the Board's financial planning focus will turn to future watermain replacements, with an emphasis on cost-sharing and leveraging grant opportunities rather than attempting to independently fund full lifecycle replacement. In staff's opinion, any attempt to fully fund the system's capital costs could create a water affordability crisis for the region's ratepayers.

Given the magnitude of this project, staff emphasize that the interim financial plan assumes the receipt of external grant funding in the range of 50 percent of eligible costs in order for the full replacement to proceed. Without such assistance, the scale of required borrowing would be unsustainable for the system.

This strategy is intended as a stopgap measure until more concrete costing information is available through the design process. Because these estimates may shift once design is complete, staff will consider resubmitting the financial plan in 2026 if projected costs differ significantly from the assumptions contained in this report. Maintaining the drinking water system's licence is of paramount concern for the Board. In the meantime, this interim approach highlights that the financial sustainability of the PBASWSS is contingent on securing substantial grant funding. While the plan outlines how reserves, debt, and contingency planning can be managed to bridge toward the 2028 replacement, the Board cannot sustain itself through user rates alone. To support this effort, the Board has already applied for numerous provincial and federal grant programs in an attempt to fulfill the interim financial strategy. Without such external assistance, the cost of full system replacement would be unsustainable and place the system's long-term viability at risk.

The multi-year operating budget and capital forecasts included in this report illustrate how this approach is expected to function in practice, including the drawdown of reserves, the transition to debt servicing, the receipt of capital grant funding, and the preservation of a sustainable reserve floor.

ATTACHMENTS:

- Attachment A) 2026 Draft Budget Schedules
- Attachment B) 2026 2031 Water Financial Plan

Prepared by: A. Boylan, Director of Corporate Services/Treasurer

Approved by: N. Dias, Chief Administrative Officer

Port Burwell Area Secondary Water Supply System | Operating Budget

	Prior Years			Порега	Current Year	
	202.	4	202	5	202	6
	Budget	Actual	Budget	Forecast	Budget	Change
<u>Expenses</u>						
Purchase of Water	\$270,000	\$275,600	\$280,000	\$289,000	\$310,000	\$30,000
OCWA Contract	\$96,400	\$102,521	\$96,800	\$110,000	\$112,200	\$15,400
Insurance	\$23,000	\$27,927	\$29,600	\$26,474	\$29,600	\$0
System Repairs & Maintenance	\$62,500	\$51,818	\$62,500	\$30,000	\$57,500	-\$5,000
Booster Station	\$11,500	\$11,073	\$11,500	\$11,800	\$12,000	\$500
Wages	\$44,400	\$44,391	\$45,400	\$45,400	\$46,300	\$900
SCADA	\$26,300	\$26,372	\$26,800	\$25,700	\$26,800	\$0
Studies & Reports	\$20,000	\$20,352	\$0	\$0	\$0	\$0
Audit Fees	\$6,800	\$5,118	\$6,800	\$5,200	\$5,300	-\$1,500
Miscellaneous	\$200	\$0	\$200	\$0	\$200	\$0
Total Expenses	\$561,100	\$565,172	\$559,600	\$543,574	\$599,900	\$40,300
Capital Costs	\$11,800	\$11,880	\$35,500	\$23,700	\$1,219,600	\$1,184,100
Revenue						
Water Billings	\$937,000	\$901,083	\$987,000	\$951,000	\$1,060,000	\$73,000
Investment Income	\$50,000	\$164,988	\$148,900	\$206,000	\$150,000	\$1,100
Total Revenue	\$987,000	\$1,066,071	\$1,135,900	\$1,157,000	\$1,210,000	\$74,100
Reserve Transfers						
Contributions to Reserves	\$445,900	\$446,000	\$576,300	\$576,300	\$610,100	\$33,800
Less: Capital Costs	-\$31,800	-\$32,232	-\$35,500	\$0	-\$1,219,600	-\$1,184,100
Operating Surplus/(Deficit)	\$0	\$75,251	\$0	\$13,426	\$0	\$0
Net Reserve Transfer	\$414,100	\$489,019	\$540,800	\$589,726	-\$609,500	-\$1,150,300
Net Total	\$0	\$0	\$0	\$0	\$0	\$0

Port Burwell Area Secondary Water Supply System | Operating Budget

			Current	Future Years				
	2024	2025	2026	2027	2028	2029	2030	2031
<u>Expenses</u>								
Purchase of Water	\$270,000	\$280,000	\$310,000	\$310,000	\$331,000	\$330,000	\$352,000	\$350,000
Insurance	\$23,000	\$29,600	\$29,600	\$30,500	\$31,400	\$32,000	\$32,600	\$33,300
OCWA Contract	\$96,400	\$96,800	\$112,200	\$115,600	\$119,100	\$121,500	\$123,900	\$126,400
System Repairs & Maintenance	\$62,500	\$57,500	\$57,500	\$58,700	\$59,900	\$61,100	\$62,300	\$63,500
Booster Station	\$11,500	\$11,500	\$12,000	\$12,200	\$12,400	\$12,600	\$12,800	\$13,000
Wages	\$44,400	\$45,400	\$46,300	\$47,300	\$48,300	\$49,300	\$50,300	\$51,300
SCADA	\$26,300	\$21,800	\$26,800	\$24,600	\$24,600	\$24,600	\$24,600	\$24,600
Audit Fees	\$6,800	\$6,800	\$5,300	\$5,500	\$5,700	\$5,900	\$6,100	\$6,300
Miscellaneous	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200
Total Expenses	\$421,700	\$423,200	\$599,900	\$604,600	\$632,600	\$637,200	\$664,800	\$668,600
Revenue								
Water Billings	\$937,000	\$987,000	\$1,060,000	\$1,076,000	\$1,173,000	\$1,191,000	\$1,297,000	\$1,317,000
Investment Income	\$50,000	\$148,900	\$150,000	\$152,700	\$184,800	\$44,900	\$49,500	\$61,900
Total Revenue	\$987,000	\$1,135,900	\$1,210,000	\$1,228,700	\$1,357,800	\$1,235,900	\$1,346,500	\$1,378,900
<u>Capital-Related</u>								
Contributions to Reserves	\$445,900	\$576,300	\$610,100	\$624,100	\$282,728	\$156,228	\$239,228	\$267,828
Debt Servicing			\$0	\$0	\$442,472	\$442,472	\$442,472	\$442,472
Total	\$445,900	\$576,300	\$610,100	\$624,100	\$725,200	\$598,700	\$681,700	\$710,300
Net Total	-\$119,400	-\$136,400	\$0	\$0	\$0	\$0	\$0	\$0

Port Burwell Area Secondary Water Supply System | Capital Budget

<i>3</i>	Current		·	uture Year	S	
	2026	2027	2028	2029	2030	2031
Watermain Replacement (7km east of watertower)	\$0	\$0	\$19,903,000	\$0	\$0	\$0
Watermain Replacement Design	\$1,097,000	\$0	\$0	\$0	\$0	\$0
Main line pressure regulating valve PRV rebuild	\$0	\$8,000	\$0	\$0	\$0	\$8,000
Interior coatings touch up & ROV inspection	\$40,000	\$0	\$0	\$0	\$0	\$0
SCADA server uggrades	\$72,000	\$0	\$0	\$0	\$0	\$0
Increase height of catwalk handrail	\$0	\$0	\$0	\$27,500	\$0	\$0
Remove and replace non-compliant rungs from catwalk	\$0	\$0	\$0	\$20,000	\$0	\$0
Repair and test cathodic protection and replace anode	\$10,600	\$0	\$0	\$0	\$0	\$0
Water tower power wash	\$0	\$30,000	\$0	\$0	\$0	\$0
Condition assessment of rechlorination facility	\$0	\$0	\$12,500	\$0	\$0	\$0
Chamber condition assessment and asset review	\$0	\$50,000	\$0	\$0	\$0	\$0
Total Capital Costs	\$1,219,600	\$88,000	\$19,915,500	\$47,500	\$0	\$8,000
Capital Financing						
Reserves	\$1,219,600	\$88,000	\$2,582,500	\$47,500	\$0	\$8,000
Debt	\$0	\$0	\$7,333,000	\$0	\$0	\$0
Grants	\$0	\$0	\$10,000,000	\$0	\$0	\$0
Total	\$1,219,600	\$88,000	\$19,915,500	\$47,500	\$0	\$8,000
D						
Reserves						
Opening Reserve Balance	\$3,718,367	\$3,108,867	\$3,644,967	\$1,345,195	\$1,453,923	\$1,693,152
Add: Contributions to Reserves	\$610,100	\$624,100	\$282,728	\$156,228	\$239,228	\$267,828
Less: Capital Costs	-\$1,219,600	-\$88,000	-\$2,582,500	-\$47,500	\$0	-\$8,000
Closing Reserve Balance	\$3,108,867	\$3,644,967	\$1,345,195	\$1,453,923	\$1,693,152	\$1,952,980



Port Burwell Area Secondary Water Supply System

September, 2025

FINANCIAL PLAN (O.REG 453/07)

To obtain a municipal drinking water licence, the Safe Drinking Water Act, 2002, requires the development a 6-year financial plan which provides a forecast of the financial needs of its drinking water system. Ontario regulation 453/07 requires the financial plan be approved through a resolution of council, submitted to the Ministry of Municipal Affairs and Housing six months prior to licence expiration.

Ontario regulation 453/07 further prescribes the format and details contained within water financial plans. The Port Burwell Area Secondary Water Supply System's 2026 – 2031 Water Financial Plan conforms with these requirements as well as Canadian Institute of Chartered Accountants Public Sector Accounting Standards. The financial information contained within this plan is organized in a way that demonstrates compliance with the Port Burwell Area Secondary Water Supply System's legislative requirements.

Financi	al Plan Contents O.Reg. 453/07 s.3
Section 1	Details of the proposed financial position of the drinking water system itemized by: i) total financial assets ii) total liabilities iii) net assets/debt iv) non-financial assets including changes in tangible capital assets
Section 2	Details of the proposed financial operations of the drinking water system itemized by: i) total revenues, further itemized by water rates, user charges and other revenues ii) total expenses, further itemized by amortization expenses, interest expenses and other expenses iii) annual surplus or deficit iv) accumulated surplus or deficit
Section 3	Details of the drinking water system's proposed gross cash requirements and gross cash payments itemized by: i) Operating ii) Capital iii) Investing iv) Financing v) Net changes in cash and cash equivalents vi) Cash and cash equivalents at the beginning and end of the year

Note: This financial plan is not an audited document and contains various estimates. All financial information contained herein is for financial planning purposes only.

SECTION 1: STATEMENT OF FINANCIAL POSITION

Purpose: provides information that describes how the Port Burwell Area Secondary Water Supply System's assets, liabilities, and accumulated surplus are expected to change over the forecast period.

Table 1 - Statement of Financial Position											
	Note	2026	2027	2028	2029	2030	2031				
Net Financial Assets	(1)										
Cash		264,482	278,497	301,257	452,706	460,056	453,877				
Investments		2,752,049	3,272,808	942,189	897,968	1,121,009	1,385,353				
Accounts Receivable		176,667	179,333	195,500	198,500	216,167	219,500				
Trade Payables		(84,330)	(85,670)	(93,750)	(95,250)	(104,080)	(105,750)				
Long-term Liabilities		-	-	(7,254,245)	(7,171,584)	(7,084,823)	(6,993,758)				
		3,108,867	3,644,969	(5,909,049)	(5,717,660)	(5,391,671)	(5,040,778)				
Non-Financial Assets	(2)										
Tangible Capital Assets		4,203,240	4,060,348	23,704,677	23,391,069	23,031,412	22,697,789				
		4,203,240	4,060,348	23,704,677	23,391,069	23,031,412	22,697,789				
Accumulated Surplus		7,312,107	7,705,316	17,795,628	17,673,409	17,639,741	17,657,011				

(1) Net Financial Assets

Between 2026 and 2031, the Township's net financial asset position is projected to be shaped by annual surpluses, ongoing capital needs, and debt repayment. Most years anticipate only moderate capital programs, allowing operating surpluses and amortization to flow into reserves and help maintain stability.

A significant reduction is forecasted in 2028, when the Township undertakes replacement of 7 kilometres of watermain west of Port Burwell. The project will be funded by a \$10 million provincial grant, \$7.3 million in new long-term debt, and a draw from reserves, resulting in a shift into a net debt position despite the grant funding. From 2029 onward, capital activity is expected to remain modest and steady debt repayment should gradually improve the Township's position through 2031.

Table 1.1 - Net Financial Assets/Debt								
	2026	2027	2028	2029	2030	2031		
Net Financial Assets, Opening	3,718,368	3,108,868	3,644,968	(5,909,049)	(5,717,660)	(5,391,670)		
Change in Net Financial Assets								
Annual Surplus/(Deficit)	416,555	393,208	10,090,312	(122,218)	(33,667)	17,270		
Less: Asset Acqusitions	153,545	150,892	258,671	361,108	359,656	341,623		
Add: Amortization of Assets	(1,179,600)	(8,000)	(19,903,000)	(47,500)	-	(8,000)		
Net Change in Financial Assets	(609,500)	536,100	(9,554,017)	191,389	325,989	350,893		
Net Financial Assets, Closing	3,108,867	3,644,969	(5,909,049)	(5,717,660)	(5,391,671)	(5,040,778)		

(2) Tangible Capital Assets

Under Public Sector Accounting Board (PSAB) standards, tangible capital assets are considered to be physical assets that are used in the production or supply of goods and services, have a useful life extending beyond a single reporting period, and are not intended for sale in the ordinary course of operations. Unlike asset management planning which measures assets in terms of future replacement cost, tangible capital assets under PSAB rules are measured at their historical purchase price or construction cost.

The Port Burwell Area Secondary Water Supply System's water system utilizes tangible capital assets in the following categories:

- I. Watermains
- II. Hydrants
- III. Booster Stations
- IV. Sample Stations
- V. SCADA and PLC Equipment
- VI. Meters

Tangible capital assets are meausred by their net book value, that being the historical cost of an asset less any accumulated amortization over its useful life. Amortization reflects the consumption of of an asset's economic benefits over its useful life. The Port Burwell Area Secondary Water Supply System calculates amortization based on the straight-line approach with half-year amortization applied in the year of acquisition or construction and in the last year of the asset's useful life.

Table 1.2 below tangible capital assets are projected to increase significantly over the forecast period as a result of planned infrastructure investment. Routine capital additions in most years remain modest and are largely offset by annual amortization, keeping the overall asset base relatively stable.

In 2028, the Township expects a major increase with the replacement of 7 kilometres of watermain west of Port Burwell. This \$19.9 million project, supported by provincial grant funding and long-term debt, will expand the Township's net book value of assets to more than \$23 million. From 2029 through 2031, with limited new acquisitions and stable amortization, the tangible capital assets are forecasted to decline gradually, reflecting the normal aging of assets in the absence of signficant infrastructure investments.

The balance of tangible capital assets is summarized as follows:

Table 1.2 - Tangible Capital Assets									
	2026	2027	2028	2029	2030	2031			
<u>Historical Cost</u>									
Opening Balance	6,400,379	7,579,979	7,587,979	27,490,979	27,538,479	27,538,479			
Acqusitions/(Disposals)	1,179,600	8,000	19,903,000	47,500	-	8,000			
Closing Balance	7,579,979	7,587,979	27,490,979	27,538,479	27,538,479	27,546,479			
Accumulated Amortization									
Opening Balance	3,223,194	3,376,739	3,527,631	3,786,302	4,147,410	4,507,066			
Amortization Expense	153,545	150,892	258,671	361,108	359,656	341,623			
Closing Balance	3,376,739	3,527,631	3,786,302	4,147,410	4,507,066	4,848,690			
Net Book Value	4,203,240	4,060,348	23,704,677	23,391,069	23,031,412	22,697,789			

SECTION 2: STATEMENT OF OPERATIONS

Purpose: the Statement of Operations summarizes the revenues and expenses generated by the water system for a given period.

Table 2: Statement of Operations								
	Note	2026	2027	2028	2029	2030	2031	
Revenues								
Billing Revenue	(3)	1,060,000	1,076,000	1,173,000	1,191,000	1,297,000	1,317,000	
Investment Earnings		-	-	10,000,000	-	-	-	
Grants	(7)	150,000	152,700	184,800	44,900	49,500	61,900	
		1,210,000	1,228,700	11,357,800	1,235,900	1,346,500	1,378,900	
Expenses								
Operating Costs	(4)	639,900	684,600	645,100	637,200	664,800	668,600	
Amortization	(2)	153,545	150,892	258,671	361,108	359,656	341,623	
Interest	(8)	-	-	363,717	359,811	355,711	351,407	
		793,445	835,492	1,267,488	1,358,118	1,380,167	1,361,630	
Annual Surplus/(Deficit)	(5)	416,555	393,208	10,090,312	(122,218)	(33,667)	17,270	
Accumulated Surplus	(6)							
Reserves		3,108,867	3,644,967	1,345,196	1,453,924	1,693,152	1,952,980	
Tangible Capital Assets		4,203,240	4,060,348	16,450,432	16,219,485	15,946,590	15,704,031	
Total Acc. Surplus		7,312,107	7,705,315	17,795,628	17,673,409	17,639,742	17,657,011	

(3) Billing Revenue

The Port Burwell Area Secondary Water Supply System (PBASWSS) operates under a system rate established by the Board, which is charged to member municipalities in accordance with the governing transfer order. Municipal members, in turn, recover these costs from end users through their tertiary systems. Slow growth is forecasted for the system over the projection period, with an assumed water loss of 6 percent to be absorbed by the secondary system. The rate structure is based solely on a constant volume rate, and while demand is expected to trend upward gradually, actual consumption may vary depending on growth patterns, which are reviewed and monitored annually.

(4) Operating Costs

Projected operating costs for the Port Burwell Area Secondary Water Supply System (PBASWSS) are shown in Table 2.1. These costs reflect the ongoing purchase of treated water, including forecasted rate increases for purchases from the Elgin Area Primary Water Supply System, as well as operation and maintenance of pump stations, the operations contract with OCWA, routine system repairs, SCADA system support, and administrative expenses. The forecast incorporates expected inflationary pressures together with scheduled maintenance activities, and forms the basis for establishing the system rate charged to member municipalities.

Table 2.1 Operating Costs							
	2026	2027	2028	2029	2030	2031	
Purchases of Treated Water	310,000	310,000	331,000	330,000	352,000	350,000	
OCWA Contract	112,200	115,600	119,100	121,500	123,900	126,400	
Wages	27,900	28,500	29,100	29,700	30,300	30,900	
System Repairs	97,500	138,700	72,400	61,100	62,300	63,500	
Booster Station	12,000	12,200	12,400	12,600	12,800	13,000	
SCADA System	26,800	24,600	24,600	24,600	24,600	24,600	
Administrative	53,500	55,000	56,500	57,700	58,900	60,200	
Total	639,900	684,600	645,100	637,200	664,800	668,600	

(5) Annual Surplus/(Deficit)

The forecasted annual surplus and deficit position reflects the Board's long-term financial strategy for managing both reserve contributions and debt servicing. Up to 2027, the system rate is intentionally set above the level of annual operating costs, allowing surpluses to be directed into reserves. This practice strengthens the system's financial capacity and prepares for upcoming infrastructure replacement needs.

In 2028, reserves are drawn down significantly to fund a portion of the watermain replacement project. At the same time, new long-term debt is issued to finance the balance of the capital program. Following this transition, annual reserve contributions are largely redirected to debt servicing, reducing the scope for further reserve growth but avoiding sudden rate increases to users. As a result, the forecast shifts from a period of reserve accumulation to one of debt management and financial stabilization.

(6) Accumulated Surplus/(Deficit)

Accumulated surplus represents the Township's overall net resources, consisting of reserves held for future needs and the net investment in tangible capital assets after deducting related debt. Over time, accumulated surplus changes with annual operating results, capital investment, reserve transfers, and debt activity. In years when revenues exceed expenses, reserves and accumulated surplus grow. When reserves are drawn to fund major projects, such as the planned watermain replacement in 2028, accumulated surplus decreases in its reserve component but increases in its investment in tangible capital assets. As debt is repaid in subsequent years, the composition of accumulated surplus gradually shifts again, reflecting less reliance on reserves and more balance between asset ownership and long-term obligations.

(7) Grants

The financial forecast assumes that a significant provincial grant will be secured to support the replacement of the watermain west of Port Burwell. Should this funding not materialize, the Board would be required to reassess the timing, scope, or financing approach for the project. In the absence of grant revenue, the full cost of the watermain replacement would need to be borne by member municipalities through debt and/or rate increases. Given that the Port Burwell Area Secondary Water Supply System already has some of the highest water rates in the Province, such an outcome would result in substantial affordability challenges and could compromise the financial sustainability of the system.

(8) Interest

The financial forecast includes interest expenses arising from the issuance of long-term debt to finance a portion of the watermain replacement project. The initial borrowing is assumed to be \$7,333,000, structured as a 30-year debenture through Infrastructure Ontario at an interest rate of 4.96 percent, consistent with August lending rates. Annual interest costs are expected to remain significant in the early years of repayment, gradually declining as principal is repaid over time. These costs reduce the capacity to contribute to reserves, as a portion of the system rate that would otherwise be directed to reserve growth is redirected to debt servicing.

SECTION 3: STATEMENT OF CASH FLOW

The Statement of Cash Flows shows that operating activities are expected to generate positive cash inflows throughout the forecast period. These inflows are applied to fund routine capital acquisitions and to purchase investments in most years. In 2028, cash flows reflect the impact of the watermain replacement project, with a large capital outflow balanced by grant funding, a reserve draw, and the issuance of long-term debt. Beyond 2028, operating cash flows remain sufficient to cover ongoing capital needs, while debt repayment becomes a recurring financing outflow.

Table 3: Statement of Cas	sh Flows					
	2026	2027	2028	2029	2030	2031
Opening Cash Balance	248,232	264,481	278,496	301,256	452,705	460,055
Operating						
Annual Surplus/(Deficit)	416,555	393,208	10,090,312	(122,219)	(33,667)	17,270
Add: Amortization of Assets	153,545	150,892	258,671	361,108	359,656	341,623
Change in Accounts Receivable	(12,167)	(2,666)	(16,167)	(3,000)	(17,667)	(3,333)
Change in Accounts Payable	6,080	1,340	8,080	1,500	8,830	1,670
Net Operating Cash Flow	564,013	542,774	10,340,896	237,389	317,152	357,230
Capital						
Asset Acquisitions	(1,179,600)	(8,000)	(19,903,000)	(47,500)	-	(8,000)
Net Capital Cash Flow	(1,179,600)	(8,000)	(19,903,000)	(47,500)	-	(8,000)
Investing						
Proceeds from Investments	631,836	-	2,330,619	44,221	-	-
Investment Acquisitions		(520,759)	-	-	(223,041)	(264,344)
Net Investment Cash Flow	631,836	(520,759)	2,330,619	44,221	(223,041)	(264,344)
Financing						
Add: Debt Issuance Proceeds	-	-	7,333,000	-	-	-
Less: Debt Repayment	-	-	(78,755)	(82,661)	(86,761)	(91,065)
Net Financing Cash Flows	-	-	7,254,245	(82,661)	(86,761)	(91,065)
Net Change in Cash Flow	16,249	14,015	22,760	151,449	7,350	(6,179)
Closing Cash Balance	264,481	278,496	301,256	452,705	460,055	453,876



June 23, 2025

The Honourable Kinga Surma Minister of Infrastructure 5th Floor, 777 Bay Street Toronto, ON M7A 2J3

RE: Municipal Housing Infrastructure Program (MHIP)- Health and Safety Water Stream (HSWS) Infrastructure Fund Application- Port Burwell Area Secondary Water Supply System

Dear Minister Surma,

I am writing to share my support on behalf of Council of the Municipality of Central Elgin for the joint application from the Municipality of Bayham and the Township of Malahide under the Municipal Housing Infrastructure Program (MHIP) Health and Safety Water Stream Infrastructure Fund Application for the Port Burwell Area Secondary Water Supply System (PBASWSS).

Funding from the Municipal Housing Infrastructure Program (MHIP) for the PBASWSS project will support the upgrades of seven kilometers of transmission watermain along Nova Scotia Line. The Port Burwell Secondary watermain provided both potable water and fire protection to the residents of Vienna and Port Burwell in the Municipality of Bayham.

I am pleased that the Joint Board of Management are working to ensure that residents of Port Burwell and Vienna are provided with a safe and reliable source of water. Since 2019, this watermain has experienced four major failures affecting the supply of potable water and fire protection to the residents of Vienna and Port Burwell in the Municipality of Bayham.

Sincerely

Andrew Sloan

Mayor

Cc: The Honorable Rob Flack, MPP, Minister of Municipal Affairs and Housing Carey Herd, Chief Administrative Officer, Municipality of Central Elgin Pete Barbour, Chair, Port Burwell Area Secondary Water Supply System Board of Management