

Agenda

Elgin Area Primary Water Supply System Joint Board of Management

1st Meeting of the Elgin Area Primary Water Supply System Joint Board of Management

December 5, 2024, 5:00 PM

Committee Room #5

The Elgin Area Water Supply System and its benefiting municipalities are situated on the traditional lands of the Anishinaabek(Uh-nish-in-ah-bek), Haudenosaunee(Ho-den-no-show-nee), Lūnaapéewak(Len-ah-pay-wuk) and Attawandaron (Add-a-won-da-run) peoples.

We honour and respect the history, languages and culture of the diverse Indigenous people who call this territory home.

This region is currently home to many First Nations, Inuit and Métis people today and we are grateful to have the opportunity to live and work in this territory.

	Pages
1. Call to Order	
1.1 Disclosures of Pecuniary Interest	
1.2 Election of Chair and Vice Chair for the term ending November 30, 2026	
2. Adoption of Minutes	
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5. Deferred Matters/Additional Business

6. Upcoming Meeting Dates

March 6, 2025

June 5, 2025

October 2, 2025

7. Adjournment

Elgin Area Primary Water Supply System Report

4th Meeting of the Elgin Area Primary Water Supply System Joint Board of Management
October 3, 2024

Attendance: Meeting held on Thursday, October 3, 2024, commencing at
5:00 PM.

PRESENT: S. Hillier (Chair); J. Adzija, P. Barbour, K. Loveland,
E. Pelozza, S. Peters, S. Stevenson and J. Bunn (Committee
Clerk)

ALSO PRESENT: B. Haklander and A. Henry

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

2. Adoption of Minutes

2.1 Minutes of the 3rd Meeting held on Thursday, June 6, 2024

BARBOUR AND ADZIJA

That the minutes of the 3rd meeting of the Elgin Area Primary Water
Supply System Joint Board of Management, from the meeting held on
October 3, 2024, **BE NOTED AND FILED. CARRIED**

Motion Passed

3. Consent Items

3.1 Quarterly Compliance Report (2nd Quarter 2024: April - June)

BARBOUR AND STEVENSON

That, on the recommendation of the Chief Administrative Officer, the report
dated October 3, 2024, with respect to the general, regulatory and
contractual obligations of the Elgin Area Primary Water Supply System,
from April to June 2024, **BE RECEIVED. CARRIED**

Motion Passed

3.2 Environmental Management System and Quality Management System

BARBOUR AND STEVENSON

That, on the recommendation of the Chief Administrative Officer, the report dated October 3, 2024, with respect to the Environmental Management System and Quality Management System, **BE RECEIVED. CARRIED**

Motion Passed

3.3 Quarterly Operating Financial Status - 2nd Quarter 2024

BARBOUR AND STEVENSON

That, on the recommendation of the Chief Administrative Officer, the report dated October 3, 2024, with respect to the Quarterly Operating Financial Status of the Elgin Area Primary Water Supply System for the 2nd Quarter of 2024, **BE RECEIVED. CARRIED**

Motion Passed

3.4 Capital Status Report

BARBOUR AND STEVENSON

That, on the recommendation of the Chief Administrative Officer, the following actions be taken with respect to the report, dated October 3, 2024, related to the Capital Status Report for the Elgin Area Primary Water Supply System:

- a) projects EA2172 Terminal Reservoir Isolation, EA4156 High Lift Pump Replacement, EA4162 Crop Yield Monitoring and EA4188 Lighting/Breaker Panel Replacement, **BE CLOSED** with surplus funding in the approximate amount of \$2,429,151 being released to the Reserve Funds;
- b) project EA3020 Roof Replacement **BE CLOSED** with additional funding in the approximate amount of \$28,831 being drawn from the Reserve Funds; and,
- c) the above-noted report **BE RECEIVED. CARRIED**

Motion Passed

4. Items for Discussion

4.1 DELEGATION - Hawk Cliff Banders

STEVENSON AND PELOZA

That the delegation and presentation, as appended to the Agenda, from C. Crocker, Hawk Cliff Banders, with respect to the Hawk Cliff Banding Station, **BE RECEIVED**; it being noted that a certificate of appreciation was presented to the Elgin Area Primary Water Supply System Board.
CARRIED

Motion Passed

4.2 2025 Operating and Capital Budgets

STEVENSON AND BARBOUR

That, on the recommendation of the Chief Administrative Officer, the following actions be taken with respect to the report, dated October 3, 2024, related to the Elgin Area Primary Water Supply System 2025 Operating and Capital Budgets:

- a) the 2025 Operating Budget **BE APPROVED**, in the total amount of \$16,729,982, as appended to the above-noted report;
- b) the 2025 Capital Budget **BE APPROVED**, in the total amount of \$3,296,000, as appended to the above-noted report;
- c) the 2025 rate for water of \$1.0337 per cubic meter **BE APPROVED**;
- d) the 2026 to 2034 Capital Forecast **BE RECEIVED**; and,
- e) the 2023 to 2029 Flow and Financial Analysis **BE RECEIVED**.
CARRIED

Motion Passed

4.3 Rules of Order and Procedure By-law

PELOZA AND STEVENSON

That, on the recommendation of the Chief Administrative Officer, the following actions be taken with respect to the report, dated October 3,

2024, related to the Rules of Order and Procedure By-law 13-2024 for the Elgin Area Primary Water Supply System:

a) the Rules of Order and Procedure By-law, as appended to the above-noted report **BE APPROVED**; and,

b) the above-noted report **BE RECEIVED. CARRIED**

Additional Votes:

PELOZA AND PETERS

Motion to approve the Second Reading of By-law No. 13-2024.

Motion Passed

PETERS AND ADZIJA

Motion to approve the Third Reading and Enactment of By-law No. 13-2024.

Motion Passed

4.4 Public Notice Policy

PELOZA AND BARBOUR

That, on the recommendation of the Chief Administrative Officer, the following actions be taken with respect to the report, dated October 3, 2024, related to the Public Notice Policy for the Elgin Area Primary Water Supply System:

a) the Public Notice Policy, as appended to the above-noted report, **BE ENDORSED**; and,

b) the above-noted report **BE RECEIVED. CARRIED**

Motion Passed

4.5 Water Quality Facility Plan Update

BARBOUR AND PELOZA

That, on the recommendation of the Chief Administrative Officer, the following actions be taken with respect to the report, dated October 3,

2024, related to the Water Quality Facility Plan Update for the Elgin Area Primary Water Supply System:

a) the above-noted Water Quality Facility Plan Update, as appended to the above-noted report, **BE ENDORSED**; and,

b) the above-noted report **BE RECEIVED. CARRIED**

Motion Passed

5. Deferred Matters/Additional Business

None.

6. Next Meeting Date

December 5, 2024

7. Adjournment

STEVENSON AND ADZIJA

That the meeting BE ADJOURNED.

Motion Passed

The meeting adjourned at 6:01 PM.

Elgin Area Primary Water Supply System Report

5th Special Meeting of the Elgin Area Primary Water Supply System Joint Board of Management
November 4, 2024

Attendance: Meeting held on Monday, November 4, 2024, commencing at 1:00 PM.

PRESENT: S. Hillier (Chair); P. Barbour, J. Herbert, K. Loveland, E. Pelozza, S. Peters, S. Stevenson, M. Widner and J. Bunn (Committee Clerk)

ALSO PRESENT: A. Henry and K. Scherr

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

2. Adoption of Minutes

None.

3. Consent Items

None.

4. Items for Discussion

None.

5. Deferred Matters/Additional Business

None.

6. Next Meeting Date

December 5, 2024

7. Confidential

STEVENSON AND BARBOUR

That the Elgin Area Primary Water Supply System Joint Board of Management convene In Closed Session for the purpose of considering the following:

7.1 Position, Plan, Procedure, Criteria or Instruction for Negotiation
Purposes/Confidential Information Supplied by Canada/Province/Territory/Crown
Agency of Same

A matter pertaining to a position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality or local board and information explicitly supplied in confidence to the municipality or local board by Canada, a province or territory or a Crown agency of any of them.

Motion Passed

The Elgin Area Primary Water Supply System Joint Board of Management convened In Closed Session from 1:02 PM to 1:14 PM.

8. Adjournment

STEVENSON AND HERBERT

That the meeting BE ADJOURNED.

Motion Passed

The meeting adjourned at 1:14 PM.

Board of Management Report

Subject: Quarterly Compliance Report (3rd Quarter 2024: July - September)

Overview:

- There were no adverse water quality incidents (AWQI) reported during this quarter.
- There are no new or proposed regulatory changes which might have a significant impact on the system.

Recommendation

That the Board of Management for the Elgin Area Primary Water Supply System **RECEIVE** this report for information.

Background

Pursuant to Board of Management resolution, this Compliance Report is prepared on a quarterly basis to report on general, regulatory, and contractual compliance issues relating to the regional water system. For clarity, the content of this report is presented in two basic areas, namely regulatory and contractual, and does not intend to portray an order of importance or sensitivity nor is it a complete list of all applicable regulatory and contractual obligations.

Discussion

Regulatory Issues

Recent Regulatory Changes: At the time of drafting this report, there are no new regulatory changes for this reporting period which may significantly impact the Elgin Area Primary Water Supply System (EAPWSS).

New Environmental Registry of Ontario (ERO) Postings: At the time of drafting this report, there were no new postings on the ERO that may have a significant impact on the EAPWSS.

Quarterly Water Quality Reports: The [Water Quality Quarterly Report](#) for the period of July 1 – September 30, 2024 was completed by the operating authority, and is posted on the Water Systems' website for public information. Note: In order to better comply with the *Accessibility for Ontarians with Disabilities Act, 2005*, the detailed tables of water quality test results which were previously appended to this Report have been removed. The full list and test results of drinking water quality parameters is posted on the water system's website and available in print at the Board's Administration Office in

London upon request. In addition, the detailed water quality information is also published within the water system's Annual Report required by O.Reg. 170/03 under the *Safe Drinking Water Act*.

Adverse Water Quality Incidents (AWQI): There were no AWQI reported by the operating authority or the external laboratory during this quarter.

Compliance Inspections: The annual inspection by the Ministry of the Environment, Conservation and Parks (MECP) took place on September 26, 2024. The final inspection report will be the subject of a future report to the Board.

Contractual Issues

ARTICLE 3, "Operation and Maintenance of the Facilities – General": Board staff informally meets with OCWA on a monthly basis to discuss operations and maintenance related issues, and formally on a quarterly basis to review contractual performance. The 2024 third quarter Contract Report was received from OCWA on October 30, 2024, and was scheduled to be discussed at the quarterly administration meeting between Board staff and OCWA on November 14, 2024. Copies of the monthly Operations and Maintenance Reports, and quarterly Contract Reports are available at the Board's Administration Office in London upon request.

Conclusion

Board staff will continue to review new and proposed legislation for potential impacts to the EAPWSS. Board staff will continue to meet with the operating authority on a regular basis to discuss regulatory and contractual compliance issues, and ensure any non-compliances are addressed in a timely manner.

Prepared by: Erin McLeod, CET
Quality Assurance & Compliance Manager

Submitted by: Andrew J. Henry, P.Eng.
Director, Regional Water

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer

Board of Management Report

Subject: Environmental Management System and Quality Management System

Overview:

- This report provides a summary of Environmental Management System (EMS) and Quality Management System (QMS) activities that took place during the third quarter of 2024 (Q3).
- A Management Review meeting was held on September 16, 2024. The meeting minutes are attached to this report as [Appendix A](#).
- An internal Environmental Compliance Audit (Bulk Water Sales Policy, Public Access and Tour Policy, Procurement and Disposal By-Law) was conducted on August 9-14, 2024. The Internal Audit Summary Report is included as [Appendix B](#).
- An internal Environmental Compliance Audit (Ontario Regulation 25/23 - Energy Reporting and Conservation and Demand Management Plans) was conducted on September 03-09, 2024. The Internal Audit Summary Report is included as [Appendix C](#).
- An external Drinking Water Quality Management System (DWQMS) 24 Month Surveillance Audit was conducted by Intertek - SAI Global Limited on September 23, 2024. The Audit Summary Report is included as [Appendix D](#).

Recommendation

That the Board of Management for the Elgin Area Primary Water Supply System **RECEIVE** this report for information.

Background

Environmental Management System (EMS)

The Elgin Area Primary Water Supply System (EAPWSS) has an Environmental Management System (EMS) which has been registered to the ISO 14001 standard since 2003. The EAPWSS underwent a three-year registration audit in September 2023 and was recommended for registration to the ISO 14001:2015 standard for a three-year period.

The continued utilization and registration of the EMS to the ISO 14001 standard is a requirement of the Service Agreement with Ontario Clean Water Agency (OCWA), the contracted Operating Authority for the EAPWSS.

Quality Management System (QMS)

The existing EMS has been integrated with a QMS that meets the requirements of the province's Drinking Water Quality Management Standard, 2017 (DWQMS). The combined EMS/QMS is maintained by the contracted Operating Authority.

The *Safe Drinking Water Act, 2002* (SDWA) and the water system's Municipal Drinking Water License (MDWL) require that an accredited Operating Authority be in operational charge of the drinking water system. To become accredited, the Operating Authority must implement and maintain a QMS, which includes an Operational Plan meeting the requirements of the DWQMS and must undergo yearly external audits.

OCWA successfully received full scope DWQMS re-accreditation in January 2023 and is currently accredited for the three-year period ending in 2026.

Discussion

Management Review

The documented EMS/QMS and its performance requires Management Review by Top Management a minimum of once every calendar year to ensure that the Board's management team and the Operating Authority stay informed of environmental and quality related issues. Items discussed at the Management Review meetings include, but are not limited to, water quality test results, environmental and quality performance, legislative changes, identified non-conformances, corrective and preventive actions, staff suggestions, changing circumstances and business strategies, and resource requirements. Corrective and preventive actions include not only those to address non-conformance issues and opportunities for improvement identified as part of internal and external audits, but also non-compliance issues identified by the Ministry of the Environment, Conservation and Parks (MECP), suggestions from staff, and opportunities for improvement identified during the Management Review process.

To carry out more effective Management Review meetings, the Board of Management's administration has opted to conduct shorter meetings at more frequent intervals. Although each required Management Review input may not be covered at every meeting, over the course of the year all required inputs are reviewed at least once. Management Review meetings are held in a combined format for both the EAPWSS and the Lake Huron Primary Water Supply System (LHPWSS).

A Management Review meeting was held on September 16, 2024. The meeting minutes are included as [Appendix A](#) for the information of the Board of Management.

Internal Audits

Pursuant to the international ISO 14001 Standard and the provincial DWQMS, periodic “internal” audits are performed by the Board of Management’s administration to ensure continued compliance with legislated, contractual, and other requirements, as well as conformance with the ISO 14001 Standard and DWQMS. Internal audits also ensure that the ongoing operation of the drinking water system conforms to the EMS and QMS as implemented. As required by the standards, internal audits are performed a minimum of once every calendar year.

An internal Environmental Compliance Audit was conducted for the Bulk Water Sales Policy, Public Access and Tour Policy, and the Procurement and Disposal By-Law on August 09-14, 2024. No non-compliances or opportunities for improvement were identified. The Internal Audit Summary Report is included as [Appendix B](#) for the information of the Board of Management.

An internal Environmental Compliance Audit was conducted for Ontario Regulation 25/23 - Energy Reporting and Conservation and Demand Management Plans on September 03-09, 2024. No non-compliances or opportunities for improvement were identified. The Internal Audit Summary Report is included as [Appendix C](#) for the information of the Board of Management.

External Audits

Annual surveillance audits (third-party external audits) are conducted for both the EMS and QMS, with a recertification audit taking place every third year. The external registrar for both the EMS and QMS is currently Intertek - SAI Global. External audits review all aspects of the EMS or QMS, including the scope and results of internal audits, subsequent management reviews, and corrective action processes.

An external Drinking Water Quality Management Standard (DWQMS) Desktop Surveillance Audit was conducted by Intertek - SAI Global Limited on September 24, 2024. There were no non-conformances and two (2) opportunities for improvement identified. The DWQMS Desktop Surveillance Audit Summary Report is included as [Appendix D](#) for the information of the Board of Management.

Corrective and Preventive Actions

For the EMS/QMS to be effective on an on-going basis, an organization must have a systematic method for identifying actual and potential non-conformities, making corrections, and undertaking corrective and preventive actions, preferably identifying, and preventing problems before they occur. The Internal Audit process and Management Review are the two main drivers for proactively identifying potential problems, opportunities for improvement and for the implementation of corrective actions for the EAPWSS. Preventive actions may originate from identified opportunities

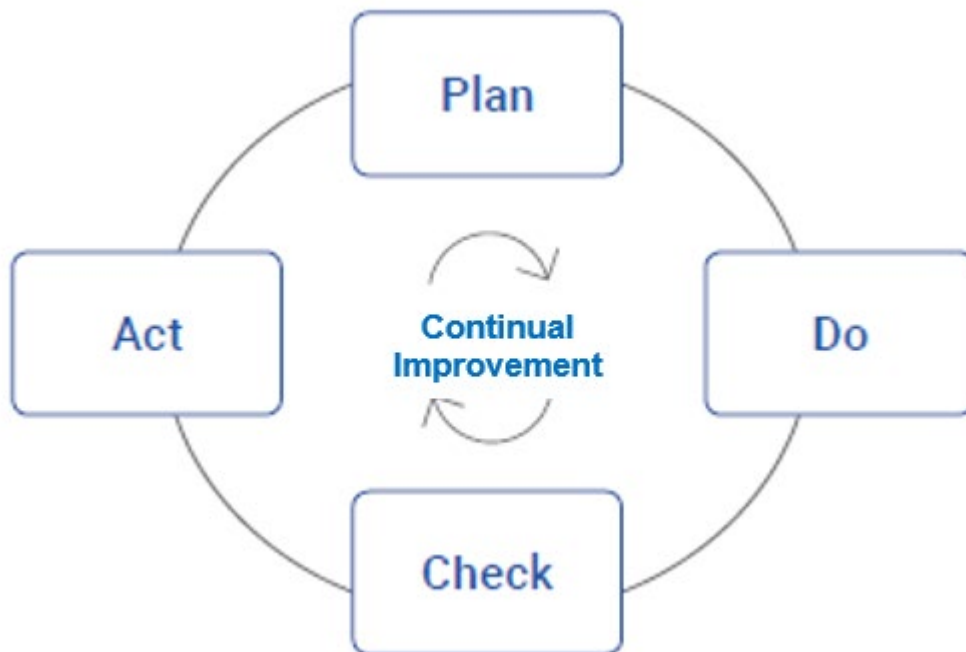
for improvement as part of an audit, but also staff suggestions and discussions with management.

It is important to note that the action items should not be construed as compliance failures, but rather an action to be undertaken which will improve the EAPWSS overall performance.

Action items are the result of the “Plan-Do-Check-Act” continual improvement process. The identification of action items is a critical component of continual improvement and an essential element of management systems. The identification of action items should be seen as a positive element, as this drives continual improvement.

A key concept of the Plan-Do-Check-Act continual improvement process (Figure 1) is that it does not require nor expect 100% conformance but promotes an environment of continual improvement by identifying shortfalls, implementing corrective and preventive measures, and setting objectives and targets for improvement.

Figure 1: Plan-Do-Check-Act Continual Improvement Process



Thirteen (13) new approved action items that have been added to the EMS/QMS action item tracking system during Q3. The new action items were added as a result of a management review meeting to review staff suggestions on August 28, 2024.

As of November 08, 2024, there are currently ten (10) open action items in the EAPWSS tracking system. All action items are prioritized and addressed using a risk-

based approach, and deadlines established given reasonable timeframes and resources that are available. The Board of Management staff are pleased with the performance of the corrective and preventive action process and have no concerns with the number of open action items.

Conclusion

The Internal Audits and frequent Management Review meetings continue to effectively identify and manage system deficiencies. The EMS/QMS for the EAPWSS continues to be suitable, adequate and effective. Activities by OCWA continue to address the need for change, and the management systems are being revised and refined as required.

Prepared by: Jennifer Levitt
Compliance Coordinator

Erin McLeod, CET
Quality Assurance & Compliance Manager

Submitted by: Andrew J. Henry, P.Eng.
Director, Regional Water

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer

Attachments: [Appendix A](#) – Management Review Meeting Minutes (September 16, 2024)

[Appendix B](#) - Internal Environmental Compliance Audit - Bulk Water Sales Policy, Public Access and Tour Policy, Procurement and Disposal By-Law (August 9-14, 2024)

[Appendix C](#) - Internal Environmental Compliance Audit - Ontario Regulation 25/23 - Energy Reporting and Conservation and Demand Management Plans (September 03-09, 2024)

[Appendix D](#) – External Drinking Water Quality Management System (DWQMS) 24 Month Surveillance Audit (September 23, 2024)

Appendix A: Management Review Meeting Minutes (September 16, 2024)

Lake Huron & Elgin Area Primary Water Supply Systems EMS/QMS Management Review

Date: September 16, 2024

Time: 1:00pm

Location: Virtual – Microsoft Teams

Attendees: Andrew Henry (RWS), Erin McLeod (RWS), Jennifer Levitt (RWS), Greg Henderson (OCWA), Denny Rodrigues (OCWA), Randy Lieber (OCWA), Jackie Muller (OCWA), Courtney Miller (OCWA)

Regrets: -

N.B.: Management Review meetings are held in a combined format for both the Lake Huron Primary Water Supply System (LHPWSS) and the Elgin Area Primary Water Supply System (EAPWSS).

-----Meeting Notes-----

1. Review and Approval of Previous Meeting Minutes (June 11, 2024)

The minutes from the previous meeting (June 11, 2024) are posted to SharePoint. Minutes circulated to comment. No concerns noted and documents are approved.

2. Appointment of EMS/QMS Representative

No updates on OCWA Safety, Process and Compliance (SPC) Manager vacancy to date.

The QMS Operational Plan and the Structure and Responsibilities Procedure specifies the SPC Manager is the EMS and QMS Representative. The Structure and Responsibility Procedure also notes that in the absence of an SPC manager, the Senior Operations Manager would fulfill those duties as necessary.

OCWA confirmed the Senior Operations Managers at LHPWSS (Denny Rodrigues) and EAPWSS (Greg Henderson) have temporarily assumed the duties of the EMS/QMS Representative.

3. DWQMS Internal Audit – EAPWSS (June 3-4, 2024)

- One (1) non-compliance (NC) and three (3) opportunities for improvement (OFI) were identified as part of the audit.

Refer to audit package for further details.

4. DWQMS Internal Audit – LHPWSS (June 17&19, 2024)

- No NC's and seven (7) OFIs were identified as part of the audit.

5. Environmental Compliance Internal Audits

- EAPWSS Board Policies and By-laws: Bulk Water Sales Policy, Public Access and Tour Policy, Procurement and Disposal By-Law (August 14, 2024) - No NC's no OFI's were identified as part of the audit.
- LHPWSS Board Policies and By-laws: Bulk Water Sales Policy, Public Access and Tour Policy, Procurement and Disposal By-Law (August 23, 2024) - No NC's or OFI's were identified as part of the audit.
- EAPWSS Energy Reporting and Conservation and Demand Management Plans (September 13, 2024) - No NC's no OFI's were identified as part of the audit.
- LHPWSS Energy Reporting and Conservation and Demand Management Plans (September 09, 2024) - No NC's no OFI's were identified as part of the audit.

6. Changes in:

a. External and internal issues relevant to the EMS

A new statement was added to ISO 14001:2015, to address the need to consider the effect of climate change on the ability to achieve the intended results of the management system. Under element 4.1 (Understanding the organization and its context) the organization shall determine whether climate change is a relevant issue.

EAPWSS – Updates to the following External and Internal Issues:

- Organizational - Staff turnover and employee retention (OCWA & RWS)
- Economic; Operational; Performance - Aging infrastructure
- Economic; Operational; Performance - Water Demand
- Economic; Operational; Performance – Project Coordination
- Economic - Project Delivery (Consultants)
- Economic - Resource inputs marketplace (includes chemicals, electricity, natural gas)
- Social - Public engagement (Complaints)
- Technology - RWS SharePoint / Multiple Systems & Support
- Environment - Changing environmental conditions / Climate Change
- Political - Supply Chain Interruptions / Delays

LHPWSS – Updates to the following External and Internal Issues:

- Organizational - Staff turnover and employee retention (OCWA & RWS)
- Economic; Operational; Performance - Aging infrastructure
- Economic; Operational; Performance - Water Demand
- Economic; Operational; Performance – Project Coordination
- Economic - Project Delivery (Consultants)
- Economic - Resource inputs marketplace (includes chemicals, electricity, natural gas)
- Social - Public engagement (Complaints)
- Technology - RWS SharePoint / Multiple Systems & Support
- Environment - Changing environmental conditions / Climate Change
- Political - Supply Chain Interruptions / Delays

See agenda package for highlighted items.

OCWA Comments:

- OCWA receives a lot of applications for operations positions, less for maintenance positions.
- Provincial salary increases of 6.5% have helped with the stability of staffing.
- Chemical costing update to be brought forward within a few weeks. Expecting to see a 5% increase for 2025.
- No issues with supply chain.

RWS Comments:

- City of London has a pre-existing agreement for the Elgin system that requires them to take a minimum of 22.7 million litres per day. London would like to enter into a Water Supply Agreement that does not establish restrictions or minimum volumes. The Elgin system would only supply the volumes that are required associated with their Southeast Reservoir and Pump Station (SERPS). As a result, there may be an increase in demand on the Huron system. Scenarios to be incorporated into the Master Water Plan. There may be contractual implications with the OCWA contract as their fee schedule was based on previous volume projections.
- Roadway improvements at Airport Road in South Huron and at Highway 21 and County Road 83 in Bluewater/South Huron may affect operations for LHPWSS. There are a number of projects planned in the region.
- There are construction impacts to the easement near Elgin Terminal Reservoir site. Project coordination needs are more intensive.
- Increase in customer complaints for EAPWSS (due to Nov./Dec. 2023 taste and odour event). Earlier than unexpected geosmin event for LHPWSS in 2024.
- For 2024, changing issues related to development projects, and planning / coordination between municipalities and RWS.

b. Needs and expectations of interested parties, including compliance obligations

A new statement was added to ISO 14001:2015, to address the need to consider the effect of climate change on the ability to achieve the intended results of the management system. Under element 4.2 (Understanding the needs and expectations of interested parties) it is noted that relevant interested parties can have requirements related to climate change.

EAPWSS – Updates to the following Interested Parties re: compliance obligations, communications, or linkages to EMS:

- City of London (Administering Municipality)
- Customers - Member Municipalities
- Source Protection Committee (Lake Erie Source Protection Committee)

LHPWSS – Updates to the following Interested Parties re: compliance obligations, communications, or linkages to EMS:

- City of London (Administering Municipality)
- Source Protection Committee (Ausable Bayfield Maitland Valley Source Protection Committee)

OCWA Comment – Working Group Meetings (EAPWSS) being reinstated at the request of the municipalities. RWS Operations Manager is coordinating a date and time with municipalities, and likely will be a virtual meeting.

RWS Comment – Inquiry made to RWS Operations Manager for possible future LHPWSS Working Group Meetings. Previously there was little interest in attendance by municipal representatives.

Refer to agenda package for further details.

c. Significant environmental impacts

- Changes to the EMS Aspects Assessment (LHPWSS):
 - Extreme weather events – added for the LHPWSS remote stations
 - Reviewed for the Huron WTP coagulation upgrade project
 - As per EMS internal audit – added potential water / soil contamination (PAHs, VOCs, hydrocarbons, dioxins, metals) as an environmental impact of Fire/Explosion onsite.
- Changes to the EMS Aspects Assessment (EAPWSS):
 - Confirmed locations of oil/grease and oil/grit interceptors and updated the assessment
 - As per EMS internal audit – added potential water / soil contamination (PAHs, VOCs, hydrocarbons, dioxins, metals) as an environmental impact of Fire/Explosion onsite.

General: Electricity consumption, chemical consumption, process water and non-revenue water continue to be tracked as part of the EMS objectives and targets or general environmental key performance indicators (KPIs).

d. Risks and Opportunities

Capital Projects Opportunities (EAPWSS & LHPWSS) - Major capital projects recently completed or currently underway include:

- (EAPWSS & LHPWSS) - The Water Quality Facility Plan (5-year update) is nearly completed. Provides recommended process optimization improvements.
- (LHPWSS) - Coagulation upgrade project is nearing substantial completion. Provides process optimization including better control of chemical dosing.

- (LHPWSS) - McGillivray Pumping Station HVAC and electrical upgrade is nearing substantial completion. Replaces aging equipment with more energy efficient technology.
- (LHPWSS) - Oneida Pipeline project provides improved water quality benefits for the region.
- (EAPWSS) - UV & Backwash Pump Replacement project will replace aging equipment. New UV units will be more reliable as the existing units are end of life.
- Many other mechanical, civil, and electrical upgrades are planned or underway.

General Opportunities (EAPWSS & LHPWSS)

- Software (OnLocation) is being implemented for visitor and contractor management. A basic orientation video for health & safety and EMS/QMS is being developed to streamline the orientation process. There are also benefits for security and emergency management.
- Software (ChemManagement) is being implemented for Safety Data Sheet (SDS) management.
- New software options are being reviewed for the Laboratory Information Management System (LIMS).
- A Contractor Safety Management Program is being developed. This will help clarify expectations for health and safety and standardize the project management approach.
- Process Optimization - OCWA corporate optimization team looking at Huron filter performance and developing a training module. Preliminary results of the filter programming changes (temperature correction and backwash program) and coagulation system upgrade have shown initial improvements in filter performance. Further optimization will continue.

RWS Comment – proposed 2025 budget has several new administrative positions proposed. If approved, more resources will be available for projects and administrative oversight.

OCWA Comment – OCWA Tools Presentation in future. SDS online program is planned to be rolled out by end of 2024. Will confirm if RWS is able to log into SDS platform.

7. Compliance Obligations Update

Compliance Obligations Update

Ontario Notices:

Approved update to the Kettle Creek Source Protection Plan and associated Assessment Report for the Kettle Creek Source Protection Area

Source: Ministry of the Environment, Conservation and Parks (MECP)

Date Posted/Notice Received: August 15, 2024

Comments Due: N/A

Summary:

Updates to the plan that protects the sources of municipal drinking water in the Kettle Creek watershed were approved by MECP on June 24, 2024. This update, which came into effect on August 12, 2024, is the first comprehensive revision to the Kettle Creek Source Protection Plan since it was first approved in 2014. This update ensures the plan is current and reflects the latest science and changes on the landscape. Changes include new and amended mapping, updated water quality information, and additional climate change considerations. Revised policies now align with the 2021 Technical Rules for identifying significant drinking water threats. New threat policies have been added for liquid hydrocarbon pipelines.

Specific changes affecting the EAPWSS included:

- Removal of significant drinking water threat storage of commercial fertilizer, which resulted in removal of the associated events-based area Intake Protection Zone 3 (IPZ-3).
- Addition of text discussing current water quality concerns related to Harmful Algal Blooms (HABs), low dissolved oxygen and manganese.
- Addition of a Climate Change Vulnerability Assessment for the EAPWSS.

Potential Impacts: None anticipated.

8. Best Management Practices – MECP website review

No updates to date.

9. Management of Change:

- New Municipal Drinking Water Licence (LHPWSS)

There is a list of 24 action items that are being managed and tracked as part of the Management of Change checklist. Will focus on the LHPWSS Residuals Management Facility (RMF) action items first because that is the first criteria that comes into effect in November 2024.

See agenda package for further details.

10. Status of Action Items

EAPWSS - nine (9) open action items

LHPWSS – eleven (11) open action items

11. New Business

Added Agenda Item – Staff Suggestions. August 28, 2024 meeting with top management to discuss the 21 staff suggestions previously identified. Action items were assigned to suggestions that were decided to be moved forward.

RWS Comment – Next board meeting is October 03, 2024 – updated policies and bylaws to be noted. Impacts to EMS/QMS should be negligible as the updates are expected to be primarily administrative. The public notice policy may be relevant for the EMS interested parties.

End of Meeting

Appendix B: Compliance Audit Summary Report - Bulk Water Sales Policy, Public Access and Tour Policy, Procurement and Disposal By-Law (August 09-14, 2024)

Audit Purpose:

The purpose of the audit was to verify compliance with relevant environmental legislation and other compliance obligations at the Elgin Area Primary Water Supply System (EAPWSS). Internal audits ensure the progress and activity of the Environmental Management System (EMS) is tracked.

Auditor Qualifications:

Jennifer Levitt has completed an ISO 14001:2015 Internal Auditor training course and an Environmental Compliance 101 course and is deemed competent to complete environmental compliance auditing.

Methodology:

The internal audit was conducted as outlined in Procedure EA-ADMIN-1600 (Compliance) as detailed in the EMS Manual. The audit checklist was generated using the Environmental Compliance Internal Audit checklist (EF-ADMIN-1600) which is attached as Appendix B of this report.

The audit was comprised of a desktop environmental compliance review of the EAPWSS. The audit was limited to the operation of the water supply system by the contracted Operating Authority, Ontario Clean Water Agency (OCWA), since the last Internal Audit conducted 12 August 2019.

Operational documents and records maintained by the Operating Authority and Regional Water Supply (RWS) for the period 12 August 2019 through 14 August 2024 were reviewed in conjunction with this compliance evaluation.

Note:

The audit was conducted through a review of a sampling of documents, limited interviews and observations by the auditor to demonstrate compliance obligations are being met as outlined in the EMS. The review and audit should not be construed as a complete and comprehensive review of all aspects and all documents.

Checklist criteria:

Compliance Obligations - Board Policies and By-Laws:

The following items had criteria in the Environmental Compliance Internal Audit checklist:

- Bulk Water Sales Policy
- Public Access and Tour Policy
- Procurement and Disposal By-Law

Interviews Conducted:

- G.Henderson, Senior Operations Manager, OCWA
- L.McVittie, Security Manager, RWS
- J.Walker, Operations Manager, RWS

FINDINGS

The following is a summary of the findings including non-compliance issues and opportunities for improvement for the EAPWSS.

Definitions:

- A non-compliance (NC) is a non-fulfilment of a regulatory requirement.
- An opportunity for improvement (OFI) describes a regulatory requirement that can be more effectively addressed.

No NC's or OFI's were identified as part of the internal compliance audit.

Appendix C: Compliance Audit Summary Report - Ontario Regulation 25/23 - Energy Reporting and Conservation and Demand Management Plans (September 03-09, 2024)

Audit Purpose:

The purpose of the audit was to verify compliance with relevant environmental legislation and other compliance obligations at the Elgin Area Primary Water Supply System (EAPWSS). Internal audits ensure the progress and activity of the Environmental Management System (EMS) is tracked.

Auditor Qualifications:

Jennifer Levitt has completed an ISO 14001:2015 Internal Auditor training course and an Environmental Compliance 101 course and is deemed competent to complete environmental compliance auditing.

Methodology:

The internal audit was conducted as outlined in Procedure EA-ADMIN-1600 (Compliance) as detailed in the EMS Manual. The audit was comprised of a desktop environmental compliance review of the EAPWSS and therefore an opening/closing meeting was not required (refer to Section 3.4.2 of EA-ADMIN-1600). An audit plan was issued August 27, 2024. The audit checklist was generated using the Environmental Compliance Internal Audit checklist (EF-ADMIN-1600) which is attached as Appendix B of this report.

The audit was limited to the operation of the water supply system by the contracted Operating Authority, Ontario Clean Water Agency (OCWA), since the last Internal Audit conducted December 14, 2020.

Operational documents and records maintained by RWS and the Operating Authority for the period December 14, 2020 through September 09, 2024 were reviewed in conjunction with this compliance evaluation.

Note:

The audit was conducted through a review of a sampling of documents, limited interviews and observations by the auditor to demonstrate compliance obligations are being met as outlined in the EMS. The review and audit should not be construed as a complete and comprehensive review of all aspects and all documents.

Checklist Criteria:

Compliance Obligations - Provincial:

The following items had criteria in the Environmental Compliance Internal Audit checklist:

- O.Reg. 25/23: Broader Public Sector: Energy Reporting and Conservation and Demand Management Plans

Interviews Conducted:

- E.McLeod, Quality Assurance & Compliance Manager, RWS

FINDINGS

The following is a summary of the findings including non-compliance issues and opportunities for improvement for the EAPWSS.

Definitions:

- A non-compliance (NC) is a non-fulfilment of a regulatory requirement.
- An opportunity for improvement (OFI) describes a regulatory requirement that can be more effectively addressed.

No NC's or OFI's were identified as part of the internal compliance audit.

Appendix D: External DWQMS 24 Month Surveillance Audit (September 23, 2024)

Audit Purpose:

The purpose of the surveillance audit was to determine whether the drinking water Quality Management System (QMS) of the EAPWSS conforms to the requirements of the Ontario Ministry of the Environment, Conservation & Parks (MECP) Drinking Water Quality Management Standard (DWQMS V2). The audit was also necessary to assess whether accreditation can continue or be offered to the operating authority.

Management System Documentation:

The management systems operational plan(s) were reviewed and found to be in conformance with the requirements of the standard.

Management Review:

Records of the most recent management review meetings were verified and found to meet the requirements of the standard. All inputs were reflected in the records and appear suitably managed as reflected by resulting actions and decisions.

Internal Audits:

Internal audits are being conducted at planned intervals to ensure conformance to planned arrangements, the requirements of the standard and the established management system.

Corrective, Preventive Action & Continual Improvement Processes:

EAPWSS is implementing an effective process for the continual improvement of the management system through the use of the quality policy, quality objectives, audit results, data analysis, the appropriate management of corrective and preventive actions and management review.

Non-Conformances:

No non-conformances were identified as part of the audit.

Opportunities for Improvement:

The following two (2) opportunities for improvement have been identified:

- Element 14 Review and Provision of Infrastructure – There is an opportunity to ensure Risk Assessment Outcomes are identified for the appropriate projects identified within the 2025 Capital Recommendations.
- Element 21 Continual improvement – There is an opportunity to address overdue OFIs within the Elgin CAF Tracking (pre 2024-2026, e.g., 770, 778, 801, 810 not addressed in the ‘Future Items [Deferred]’ tab of the 2024-2026 Elgin CAF Tracking).

Recommendation:

Based on the results of the audit it has been determined that the management system is effectively implemented and maintained and meets the requirements of the standard relative to the scope of certification identified in this report; therefore, a recommendation for (continued) certification will be submitted to Intertek - SAI Global review team.

Board of Management Report

Subject: Quarterly Operating Financial Status – 3rd Quarter 2024

Overview:

- This report shows the current fiscal year’s 3rd quarter in comparison to its Budgeted amount and the previous year’s same time period.

Recommendation

That the Board of Management for the Elgin Area Water Supply System receive this report regarding the Operating Financial Status Report for the period of July 1 to September 30, 2024, noting that this report is unaudited and subject to adjustments including the preparation of the financial statements and completion of the annual audit.

Previous and Related Reports

June 6, 2024 Quarterly Operating Financial Status – 1st Quarter 2024

October 3, 2024 Quarterly Operating Financial Status – 2nd Quarter 2024

Background

At the request of the Board of Management, a Financial Status Report is provided on a quarterly basis for information. The financial status provides a high-level overview of incurred expenditures and revenues on a cash-flow basis and is compared to the approved operating budget of the water supply system. All expenditures and revenues provided in this Financial Status Report are unaudited and may include accrued and/or unaccrued expenses from a previous or future fiscal year.

A high-level summary of incurred expenses and revenues for the water supply system is attached to this report as Appendix A for the third quarter 2024 (July 1 to September 30) as well as a comparative accumulation of expensed for the year to date.

Note: The reported expenditures and revenues may be subject to adjustments, including but not limited to corrections and entries required for the preparation of financial statements and completion of the annual audit.

Discussion

For the information and reference of the Board, the following highlights of the attached summary provides a brief explanation of notable deviations from the approved budget and/or clarifications of the financial summary:

- Contracted Operating Services in the summary report reflects the total direct operating costs of the contracted operation of the water treatment and transmission system, as well as other related contracted services. The total accumulated operating costs over the year (unaudited) is higher than the same period in 2023 and is reflective of contractual increases in service agreements with the operating authority and other contracted services.
- Contracted Administrative Services in the summary report reflects the fees paid to the City of London.
- Electricity expenditures include the purchase of energy and related energy management service charges for the water system. The water system is currently tracking approximately \$75,000 lower than the previous year.
- Salaries, wages, and benefits expenditures include all direct labour costs for administrative staff including benefits. Variations over the same period in 2023 are attributed to annual salary adjustments, and new staff hired.
- Administration and Other Expenses relates to various overhead operating expenses, including subscriptions and memberships, office supplies and property taxes. The expenses are higher than the same period in 2023 mainly due to an increase in property taxes and higher rent due to increased office space.
- Vehicles and Equipment expenditures include costs associated with vehicles, computers, and office equipment for administrative staff. The increase from 2023 is due an increase in the computer contracted service costs.
- Purchased Services and Professional Fees largely relates to allowances for ad hoc professional consulting and legal services, office lease, telephone charges, network and SCADA maintenance, printing services, and pipeline locate costs. The increased cost when compared to the same period in 2023 is attributed to increase in insurance costs and a special drain assessment.
- Debt Principal and Interest payments occur twice per year; in the first and third quarter.

- Contributions to the Reserve Funds occur at the end of the fiscal year as part of the year-end audit preparation process, where the actual contributions are the total remaining revenue in excess of expenditures. Accordingly, the amount of the anticipated contribution is currently adjusted to reflect the additional revenue and expenses incurred and may be subject to further adjustment as a result of the completion of the year-end financial statements and audit.

Prepared by: Archana Gagnier
Budget and Finance Analyst

Submitted by: Andrew J. Henry, P.Eng.,
Director, Regional Water

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer

Attachments: Operating Financial Status Summary – 3rd Quarter 2024

Quarterly Financial Summary Report

Elgin Area Water Supply system
 3rd Quarter 2024 (July 1 to September 30)
 (\$,000's)

	Approved 2024 Budget	Q3 - 2024	2024 Year to Date	Year To Date Variance	2023 Year To Date
Total Revenue	16,218	3,813	11,791	4,427	10,182
<u>Expenditures:</u>					
Contracted Operating Services	5,167	1,324	3,932	1,235	3,320
Contracted Administrative Services	175	47	142	33	137
Electricity	1,075	264	672	403	747
Salaries, Wages, Benefits	1,247	300	798	449	621
Administration and Other Expenditures	598	253	538	60	412
Vehicles and Equipment	123	8	70	53	40
Purchased Services & Professional Fees	1,058	461	930	128	790
Debt Principle Payments	1,209	0	1,201	8	2,323
Interest on Long-Term Debt	85	40	94	(9)	183
Contributions to Reserve Funds	5,480	0	231	5,249	233
Total Expenditures	16,217	2,697	8,608	7,609	8,806

Board of Management Report

Subject: Process Optimization Program Update

Overview:

- This report is intended to be updated annually to inform the Board of the progress, outcomes and benefits that the Process Optimization program has achieved.
- This report is also intended to provide future insights of the Process Optimization program at the water treatment plant.

Recommendation

That, on the recommendation of the Chief Administrative Officer, the Board of Management for the Elgin Area Primary Water Supply System **RECEIVE** this report for information regarding the Process Optimization program at the Elgin Area Water Treatment Plant.

Previous and Related Reports

December 7, 2023 Process Optimization Program Update

Background

Board staff have had a long-standing relationship with university partners, such as Western University, the University of Toronto, and the University of Waterloo. Through these partnerships, the Process Optimization program has developed and grown into an internally led effort with industry and academic support as needed. The Process Optimization program has adopted the following goals:

- Monitor and assess current treatment processes to identify optimization opportunities that defer capital spending, reduce chemical and energy usage and operational cost, and decrease process waste streams;
- Undertake capital projects that result in process improvements and/or operational procedures;
- Research emerging contaminants to understand how they may impact our treatment capacity and capability in advance of possible regulatory changes at the plant;
- Monitor changes to source water quality due to climate change to assess and maintain plant robustness;
- Support the objectives of the Environmental and Quality Policy to protect the environment, including prevention of pollution, climate change mitigation and adaptation, energy management, and chemical usage

optimization in the production of treated potable water and associated residuals treatment; and,

- Uphold the long-term sustainability, resiliency and environmental conscious principles of the Asset Management Policy and associated Plan by minimizing the impact of infrastructure on the environment, addressing the vulnerabilities and risks caused by climate change through lifecycle management and resource optimization.

Discussion

Water Quality Facility Plan

In October 2024, the Board endorsed the Water Quality Facility Plan (Plan) that reviewed the current plant processes and identified opportunities for further optimization by performing desktop, bench-scale investigations and full-scale stress testing. During the full-scale stress testing the plant was operated at its full rated capacity of 91 MLD and despite a raw water quality event occurring during the test resulting in very high turbidities, the plant was able to treat the raw water at high flows and turbidities to stay within the performance objectives set out in the operating contract. The results of the stress test were used to recommend optimization opportunities that Board staff will undertake in 2025 such as a study that will look at optimizing the pre-chlorination system and a study to optimize the polymer system to improve settled water quality.

The Plan also recommended continued monitoring of source water quality as the current Ontario Procedure for Disinfection is under review and could increase pathogen management requirements. Board staff are currently undertaking a two (2) year quantitative microbial risk assessment monthly sampling program that began in April 2024 and will conclude in March 2026. Quantitative microbial risk assessment is an approach to quantify the health risks from microorganisms present in the source water. It is being monitored to assess the current source water quality to determine if there is a need for additional treatment barriers and to assess overall risk to public health. Following the two (2) sampling periods, the Health Canada Quantitative Microbial Risk Assessment model will be used to assess risk associated with the raw water quality of the source water.

Extreme Weather Sampling

Routine monitoring of plant processes and water quality through storm event samples and the filter monitoring program are used to identify if there have been any impacts to treatment processes during extreme weather events. Storm event samples have been collected to evaluate the impact of extreme weather events on the source water, treatment processes and treated water quality by Board staff since 2010.

In 2024, a Storm Events Review was conducted to evaluate the current procedures and identify current storm event trends. The report concluded that continuing to monitor

extreme weather events to observe trends in raw water quality related to extreme weather will be beneficial to the utility. The report also concluded that online raw water quality monitoring could improve the operator's ability to respond to changes in raw water quality more effectively, resulting in increased plant resiliency. This recommendation was also noted in the Water Quality Facility Plan.

Filter Optimization

Filter optimization is the focus of the program as well as a recommendation from the Water Quality Facility Plan. On this basis a study will be undertaken to investigate the benefits of Extended Terminal Subfluidization Wash to reduce the turbidity spike experienced when placing a filter back into service. This could benefit plant operations by reducing the potential for experiencing non-compliant effluent turbidity.

Partnerships with Natural Sciences and Engineering Research Council (NSERC) Chairs in Water Treatment

Partnership in the Natural Sciences and Engineering Research Council in water treatment ended in 2022, but another program was initiated, the Natural Sciences and Engineering Research Council Alliance (Alliance). The Alliance is the new program and provides the same benefits as the previous Natural Sciences and Engineering Research Council. Board staff are currently in a partnership with the University of Toronto under the Alliance program.

University of Toronto

The current filter pilot study is looking at the removal of dissolved organic carbon, chlorine, disinfection byproduct precursors, cyanotoxins and taste and odor compounds. The study will determine if the addition of granular activated carbon caps on the filters provides enhanced removal of the aforementioned compounds compared to the current filter configuration, without the granular activated carbon cap. Preliminary results are finding that even with a shallow depth of granular activated carbon, there is a reduction in dissolved organic carbon and disinfection byproduct precursors.

Discussions with the University will take place later this year into other research opportunities the filter pilot can be used for including issues related to the emerging contaminant pre- and polyfluoroalkyl substances.

The University is also initiating a new study looking into microplastics in source water and throughout the treatment process. In September 2023, water samples were taken at the plant from the raw water, at various points throughout the treatment process and within the distribution system. The samples were taken back to the University for analysis and preliminary results of this study concluded that conventional water treatment has the potential to remove microplastics, but more research is needed to confirm this finding.

University of Waterloo

While we currently do not have a formal partnership with the University of Waterloo, we continue to keep in contact with the University and look forward to working with them again as their department evolves and changes.

2024 Research Day

In April 2024, Board Staff were able to resume the biennial Research Day. The day brought together partners that Board staff have worked with on research and process optimization projects at the Lake Huron and Elgin Area water treatment plants to present at a one-day conference. Attendees included representatives of member municipalities, operating authorities, local Ministry of Environment, Conservation and Parks staff, health unit staff, university partners, industry professionals, invited consultants and Board staff. Board staff are planning to resume the Research Day biennially with the next Research Day taking place in Spring 2026. The aim of the Research Day was to share completed projects, while demonstrating the benefits that have been realized to stakeholders. A summary of future studies and optimization efforts was also shared.

Conclusion

The Process Optimization program has been reaching its goals of monitoring and optimizing current treatment processes, researching emerging contaminants and changes to source water quality to maintain plant robustness and in advance of potential regulatory changes. The program has leveraged its research partnership with the University of Toronto and Board staff plan to continue these partnerships on future projects and studies. Looking ahead, Board staff will continue to communicate program results to the Board on an annual basis.

Prepared by: Brittany Bryans, P.Eng.
Environmental Services Engineer, Process Optimization

Submitted by: Billy Haklander, P.Eng., LL.M
Senior Manager, Capital Programs

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer

Board of Management Report

Subject: Delegated Authority Approvals and Expenditures

Overview:

- Pursuant to the Procurement of Goods and Services and Disposal of Assets Policy, the Board of Management has delegated certain powers and duties to the Director of Regional Water and/or the Chief Administrative Officer for specific procurements and related activities.
- Pursuant to the Delegation of Powers and Duties By-law, the Board of Management has delegated certain powers and duties to the Director of Regional Water and/or the Chief Administrative Officer for specific actions related to the execution of agreements and approval authorities.
- Pursuant to the Procurement of Goods and Services and Disposal of Assets Policy and the Delegation of Powers and Duties By-law, the Board of Management is to receive an annual summary report where delegated authority has been used by the water system's administration.

Recommendation

That, on the recommendation of the Chief Administrative Officer, the Board of Management for the Elgin Area Water Supply System receive this report for information.

Previous and Related Reports

December 7, 2023 Delegated Authority Approvals and Expenditures

Background

Pursuant to the Procurement of Goods and Services and Disposal of Assets Policy, this report is provided on an annual basis to provide the Board with a summary of events where delegated authority has been used by administration. The summary information covers instances related to the administrative awards of contracts and approval of expenditures in accordance with delegations of authority under the Procurement of Goods and Services and Disposal of Assets Policy as well as the Delegation of Duties and Powers By-law.

Discussion

The following are a summary of events between November 25, 2023, and November 18, 2024, where delegated authority has been used pursuant to the Purchase of Goods and Services and Disposal of Assets By-law or the Delegation of Powers and Duties By-law:

Date	Value	Description/Authority
21 Dec.2023	\$11,178.71	Contract Change Order No.10 and Contract Change Order No.11 issued for Birnham construction for additional asphalt removal and paving, as well as repairs to the automated gate opener related to the Elgin Low Lift Pumping Station Service Water Connection project EA4137. The additional work exceeds the project remaining contingency and is in excess of the originally approved contract of \$544,895.63. Jointly approved by the Director and CAO (Section 4.18.3, Procurement of Goods and Services and Disposal of Assets Policy)
1 Jun. 2024	N/A	Licence Extension and Amending Agreement L11854 (Third Renewal) with the Province of Ontario for the licence of occupancy of a portion of the Elgin water treatment plant property for an air quality monitoring station.
19 Jun. 2024	\$42,000	Service Agreement with ATSG for remote and project support services related to the water systems document management platform (Office 365)

Submitted by: Andrew J. Henry, P.Eng.,
Director, Regional Water

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer

Board of Management Report

Subject: Appointment of the CAO Bylaw

Overview:

- The Board’s CAO was initially enacted 1999 as part of the then Procurement By-law.
- The Appointment of the CAO By-law was formally adopted on June 10, 2011
- The proposed by-law updates the references to the Administering Municipality and the head of the Environment and Infrastructure service area, as well as clarifies the ability to appoint an Acting CAO in the temporary absence of the CAO

Recommendation

That the Board of Management for the Elgin Area Water Supply System **APPROVE** the Appointment of the Chief Administration Officer Bylaw as attached to this report.

Previous and Related Reports

June 9, 2011 CAO Bylaw

Background

On June 9, 2011, the Board of Management for the Elgin Area Water Supply System approved and enacted the “Appointment of the CAO” Bylaw. The approved Bylaw, in part, updated the designation of the Chief Administrative Officer as the “General Manager of Engineering and Environmental Services and City Engineer of the Administering Municipality”.

Discussion

The proposed by-law, as attached to this report, updates the appointment of the Chief Administrative Officer and references to the Administering Municipality. In addition, the proposed by-law recognizes the temporary appointment of an Acting Chief Administrative Officer in the absence of the Chief Administrative Officer.

Submitted by: Andrew J. Henry, P.Eng.,
Director, Regional Water

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer

Attachments: By-Law No. 14 - 2024 Appointment of the CAO

BY-LAW No. 14 - 2024

A by-law relating to the **Appointment of a Chief Administrative Officer** for the Elgin Area Primary Water Supply System.

BE IT ENACTED as a by-law of the Joint Board of Management for the Elgin Area Water Supply System as follows:

1.0 Definitions

1.1 In this by-law, unless the context otherwise requires:

“**Administering Municipality**” shall mean the Corporation of the City of London, and as defined in Transfer Order #W1/1998 Elgin Area Primary Water Supply System issued by the Minister of the Environment and dated effective November 29, 2000;

“**Board**” shall mean the Joint Board of Management for the Elgin Area Primary Water Supply System;

“**Elgin**” shall mean the Elgin Area Primary Water Supply System.

2.0 Appointment of the Chief Administrative Officer

2.1 In this by-law and all other by-laws and resolutions of the Board, the Chief Administrative Officer of the Elgin Area Primary Water Supply System shall be the Deputy City Manager of Environment and Infrastructure of the Administering Municipality.

2.2 The Chief Administrative Officer of the Elgin Area Primary Water Supply System shall be responsible for the provisions and obligations of the Administering Municipality as provided by the Transfer Order for the Elgin Area Primary Water Supply System (W1/1998) dated November 29, 2000, as amended by by-law, or directed by by-law or resolution of the Board from time to time.

2.3 The Deputy City Manager of Environment and Infrastructure of the Administering Municipality may delegate the appointment of the Chief Administrative Officer, in whole or in part, in respect to the responsibilities of the Administering Municipality regarding Elgin. Delegation of the appointment of the Chief Administrative Officer shall be in writing to the Board.

2.4 The delegation of the appointment of the Chief Administrative Officer may be rescinded at the discretion of the Deputy City Manager of Environment and

Infrastructure of the Administering Municipality. Rescinding the delegation of the appointment of the Chief Administrative Officer shall be in writing to the Board.

- 2.5 In the planned and temporary absence of the Chief Administrative Officer, the Chief Administrative Officer may designate an Acting Chief Administrative Officer for a period of not more than ninety (90) days.

3.0 Repeal and Enactment

3.1 Severability

Should any section, sub-section, clause or paragraph or provision of this by-law be declared by a Court to be invalid, the same shall not affect the validity of this by-law as a whole or any part thereof, other than the provisions so declared to be invalid.

3.2 Previous By-laws

By-law No. 4 pertaining to the Appointment of the Chief Administrative Officer, as enacted on June 9, 2011, and all of its amendments are hereby repealed.

3.3 Effective Date

This by-law shall come into force and take effect on December 6, 2024.

Passed in Open Session of the Board on December 5, 2024.

, Board Chair

J. Bunn, Board Secretary

First Reading – December 5, 2024

Second Reading – December 5, 2024

Third Reading – December 5, 2024

Board of Management Report

**Subject: Backwash Pump and Ultraviolet Disinfection Upgrade –
Delegation of Authority for Tender Award**

Overview:

- The Elgin Area Water Treatment Plant requires the upgrade and replacement of the existing backwash pumps and ultraviolet (UV) disinfection system. The detailed design of these upgrades has progressed over the last year by AECOM Canada Ltd.
- Due to the long lead times, Board staff proceeded with equipment pre-selection, pre-purchase and onsite delivery of the pumps and the UV disinfection system equipment.
- The tender for the general contractor is expected to be issued in December 2024 for these critical plant upgrades and will close in early 2025. Board staff seek Board approval to delegate authority to the Chief Administrative Officer to administratively award the tender, and to execute the associated contract and necessary documents, to expedite the award of this contract.
- Board staff also seek Board approval to extend the consulting services assignment to include services during the construction period.

Recommendation

That the Board of Management for the Elgin Area Water Supply System take the following actions with regard to the Backwash Pump and Ultraviolet Disinfection Upgrades project:

- a) The Board of Management for the Elgin Area Primary Water Supply system **DELEGATE** authority to the Chief Administrative Officer to administratively award the tender of the Elgin Area Water Treatment Plant Backwash Pump and UV Disinfection Upgrades, following a public procurement process which complies with the Board's Procurement of Goods and Services and Disposal of Assets Policy, provided the tender bid from the pre-qualified, successful proponent meets the Request for Tender terms and conditions and is within the budget previously approved by the Board;
- b) The Board of Management for the Elgin Area Primary Water Supply system **DELEGATE** authority to the Chief Administrative Officer to administratively award an extension of consulting engineering services to include construction services, including construction observation and contract administration, of the Backwash Pump and UV Disinfection Upgrades, provided the workplan submitted by AECOM meets the requirements of Board Staff and is within the budget previously approved by the Board;

- c) The Board of Management for the Elgin Area Primary Water Supply system **AUTHORIZE** the Chair and Chief Administrative Officer to execute a construction contract with the successful firm for the completion of the upgrades, subject to the delegation of authority as outlined above; and,
- d) the Board of Management for the Elgin Area Primary Water Supply System **RECEIVE** this report for information.

Previous and Related Reports

October 3, 2024	2025 Operating and Capital Budgets
June 1, 2023	EA4183 Elgin Water Treatment Plant UV Pre-Selection and Pre-Purchase – Single Source
June 2, 2022	EA4183 Elgin Water Treatment Plant UV Replacement – Consultant Award
March 3, 2022	EA4153 Backwash Pump Replacement Project - Prepurchase

Background

The existing Elgin Area water treatment plant backwash pumps and UV disinfection system require replacement as end-of-life assets to ensure and improve treatment performance under a range of operating conditions. This equipment has been pre-selected, pre-purchased and delivered to the water treatment plant site and is currently being stored until the construction contract is awarded and initiated. This equipment will be novated to the General Contractor and installed through the construction contract.

AECOM Canada Ltd. (AECOM) was retained to complete the detailed design of these upgrades as separate capital projects, which were combined in 2023, recognizing the need for these upgrades to be more effectively undertaken and coordinated in parallel through one construction contract.

Discussion

Board staff have initiated a competitive two-staged procurement process for qualified General Contractors to undertake these plant upgrades. Eight firms submitted pre-qualification submissions through Request for Pre-Qualification 2024-085. Three firms were pre-qualified to participate in the second Request for Tender stage. The Request for Tender is expected to be posted in December 2024 and will close in January 2025.

With the next Board meeting scheduled for March 2025, and to expedite the project as much as reasonably possible to avoid delaying planned future capital projects, and to limit the cost associated with the validity period between the tender close and the

contract award, Board staff request the Board delegate the authority to award the assignment to the Chief Administrative Officer. Delegated authority would be subject to the award not exceeding the budget previously approved by the Board. Staff also request that the Board authorize the Chair and Chief Administrative Officer the authority to execute a construction contract with the successful firm, provided their tender meets the Request for Tender terms and conditions. This would allow for a smooth transition and ensure timely initiation of the construction phase, and avoid delays associated with the timing and frequency of Board meetings.

This also allows for a reduced validity period of only 30 days for tender, rather than a longer validity period that may inflate the value of submitted bid prices.

Anticipated Operating and Service Impacts

These plant upgrades are expected to improve reliability of treatment plant equipment, improving plant performance and enhancing various Customer Levels of Service. The annual operating costs are expected to decrease based on these upgrades; however, the anticipated savings has yet to be fully quantified as it is largely dependent on the final design and planned utilization of the related equipment.

Disposal of Assets

The tender for this project includes the removal and disposal of selected assets including the two existing backwash pumps and the four existing end-of-life UV disinfection units. These assets will be removed and appropriately disposed of by the Contractor as part of the construction project, in accordance with the Contractor’s Waste Management Plan. Any scrap value of removed equipment would be considered in the Contractor’s submitted tender price.

Project Financial Status

EXPENDITURE	FORECAST	INCURRED
Design	\$481,381	\$423,951
Construction*	\$11,120,000	\$1,515,748
Other Fees and Charges	\$8,000	\$3,907
Total	\$11,609,381	\$1,943,606
Approved Budget	\$12,933,924	
Budget Surplus / Deficit	\$1,324,543	

* The forecasted construction value is based on a Class B opinion of probable cost for the project and includes consulting engineering services during construction.

Conclusion

Board staff are requesting the Board to delegate authority to the Chief Administrative Officer to award the both the construction tender as well as the consulting engineering services associated with the construction phase for the Backwash Pump and UV Disinfection Upgrade. Board staff are also requesting to authorize the Chair and Chief Administrative Officer to execute the necessary construction contract.

Board staff will continue to update the Board regarding the status of this project.

Prepared by: Marcy McKillop, P.Eng., GDPA
Environmental Services Engineer, Regional Water Supply

Submitted by: Billy Haklander, P.Eng., LL.M
Capital Programs Manager, Regional Water Supply

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer

Board of Management Report

Subject: EA4198 Emergency Filter Repairs

Overview:

- An inspection of the filters and filtered water conduit in 2023 found evidence of the failure of filter 2 and filter three at the water treatment plant.
- The Director of Regional Water and the Chief Administrative Officer authorized the emergency repairs of the filters, initially estimated at a cost of \$608,000.
- Due to discovered conditions during the repair of the filters, the final cost of the emergency repairs was \$979,027.

Recommendation

That, on the recommendation of the Chief Administrative Officer, the Board of Management for the Elgin Area Primary Water Supply System take the following actions regarding capital projects:

- a) The Board of Management **APPROVE** an increase in the project budget by \$371,027 for a total approved budget of \$979,027, the additional funds being drawn from the Emergency Reserve Fund; and,
- b) The Board **RECEIVE** this report for information.

Previous and Related Reports

March 2, 2023 EA4198 Filter Emergency Repairs

Background

The Elgin Area water treatment plant utilizes four (4) dual-media filters as part of the conventional water treatment process. Water from the sedimentation tanks flows from the settled water conduit into the anthracite/sand filters and then into a common filtered water conduit before chlorine is added for primary disinfection.

Each filter is periodically taken out of service for regular maintenance and inspection, as well as top-up of the anthracite filter media within the filter.

A routine maintenance and inspection of the filtered water conduit via a submersible Remotely Operated Vehicle (ROV) was undertaken and a large amount of filter media was observed to be accumulating at the discharge piping of filter #2 and #3. Further, during this ROV inspection as well as previous maintenance activities, it was noted that the filter's mortar coatings are also spalling and ending up in the filtered water conduit. The existence of filter media and mortar coating material in the filtered water conduit

suggest that the filter underdrains, which structurally separate the filter media from the treated water in the filtered water conduit and clearwell, has or is in the process of failing presenting an immediate risk to water quality.

Upon discovery, the Board's contracted operating authority, the Ontario Clean Water Agency (OCWA), immediately took filters #2 and #3 out of service to prevent any further damage or water quality risks. These filters remained out of service, leaving the plant operating on two filters, while the emergency repairs were completed.

Upon receipt of the inspection report and work plan for the repairs for the filters from OCWA, the Director of Regional Water, with the consent of the Chief Administrative Officer, authorized the repairs to be undertaken on an emergency basis.

The emergency authorization provisions of the Board's Procurement of Good and Services and Disposal of Assets Bylaw was used as the basis of the unbudgeted approval of the repairs as the risks to treated water quality and the reduction of plant capacity, presented a risk to the water system and its users.

With this emergency approval, OCWA has engaged Continental Carbon and AWI Underdrains pursuant to their Provincially approved purchasing policies. AWI Underdrains is the original supplier of the underdrains currently used within the filters. Continental Carbon Group is familiar with the site, as well as the specifications and standards set out by the supplier, as they are the current approved supplier of filter media and materials.

Discussion

Upon removal of the media from Filter 2, significant damage to the supporting concrete was found that wasn't identified in the reports from the ROV inspection, noting that the concrete where the underdrains connected to the structure was generally found to be soft and brittle. This soft concrete allowed spaces to be formed around and under the gasket mating surfaces and thus allowed filter media underneath the underdrains and into the filtered water conduit as noted previously in the inspection report. In order to affect the repair, the entire underdrain system had to be removed, the soft and porous concrete scraped and chiseled away, and a waterproof mortar coating applied. The mortar couldn't be applied until the underlying surface was completely dry and the drying process took a couple of weeks to complete.

Once the concrete mortar repair was applied, the filter underdrains were reinstalled. When the media was set to be reinstalled, a quality check was performed on the previously salvaged filtration media, and a significant amount of both the sand and anthracite no longer met the required specifications for the facility and new media was required.

Upon completion of the Filter 2 repairs, it was placed back in service and the filter was tested to ensure ongoing performance and the success of the repairs. After this trial period, Filter 3 was removed, and a similar repair was completed.

Noting that the estimated costs for the repair of Filter 3 would put the project over budget, it was decided to proceed using the emergency provisions of the Procurement of Good and Services and Disposal of Assets Bylaw, as further delays in the repairs would pose significant risk to the water supply and overall cost of the emergency repairs.

Delegated Powers and Duties

This project was initiated and undertaken under the emergency provisions of the Board's Procurement of Good and Services and Disposal of Assets Bylaw. The Board's Emergency Reserve Fund was used as the source of financing for this emergency repair.

Project Financial Status

The administratively approved budget for the work was \$608,000 and was based on the preliminary cost estimates provided by the Board's contracted operating authority, the Ontario Clean Water Agency. Upon completion of the work, the final cost of the emergency repairs was \$979,027 for both filters.

Conclusion

During an inspection of the filters and filtered water conduit at the water treatment plant, the Board's contracted operating authority, OCWA, discovered that filter media was bypassing the filter underdrains and accumulating within the filtered water conduit. The presence of filter media in this quantity indicates that the filter underdrains may have failed posing a risk to drinking water quality and plant capacity.

The Director of Regional Water, with the consent of the Chief Administrative Officer, authorized the creation of project EA4198 for the repairs filter to be undertaken on an emergency basis under the emergency provisions of the Board's Bylaws.

The repairs were successfully completed, and the filters have been returned to service allowing the plant to run optimally at full capacity.

Prepared by: John Walker, CD, B.Sc.
Operations Manager

Submitted by: Andrew J. Henry, P.Eng.,
Director, Regional Water

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer