The 3rd Meeting of the Elgin Area Primary Water Supply System
June 6, 2019, 11:00 AM
Committee Room #5

1. Call to Order
   1.1 Disclosures of Pecuniary Interest

2. Adoption of Minutes
   2.1 Minutes of the 2nd Meeting held on Thursday, March 7, 2019

3. Consent Items
   3.1 Kelly Scherr, Chief Administrative Officer - Quarterly Compliance Report (1st Quarter 2019: January-March)
   3.2 Kelly Scherr, Chief Administrative Officer - Environmental Management System and Quality Management System
   3.3 Kelly Scherr, Chief Administrative Officer - Water System Operation - Contract Status Update
   3.4 Kelly Scherr, Chief Administrative Officer - Quarterly Operating Financial Status Report

4. Items for Discussion
   4.1 Kelly Scherr, Chief Administrative Officer - Huron-Elgin-London Project Clean Water - Program Completion
   4.2 Kelly Scherr, Chief Administrative Officer - EA4156 High Lift Pump Replacements - Tender Award
   4.3 Kelly Scherr, Chief Administrative Officer - Member Appointment By-law
   4.4 Elgin-Middlesex Pump Station Ownership Reconciliation
      a. M. Casavecchia-Somers, Township of Malahide
5. Deferred Matters/Additional Business

6. Upcoming Meeting Dates
   
   October 3, 2019
   
   December 5, 2019

7. Adjournment
Elgin Area Primary Water Supply System
Report

2nd Meeting of the Elgin Area Water Supply System Board of Management
March 7, 2019

Attendance: Meeting held on Thursday, March 7, 2019 at the London City
Hall, commencing at 5:01 PM.

PRESENT: M. van Holst (Chair), D. Crevits, S. Hillier, E.
Peloza, J. Preston and L. Stevenson and J. Bunn (Secretary)

ALSO PRESENT: P. Corneil, S. Flanagan (OCWA), D. Gibson,
A. Henry, E. McLeod (RWS), C. Murchland (OCWA) and B. Tully
(OCWA)

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 1st meeting held on Thursday, January 31, 2019

HILLIER AND STEVENSON

That, the minutes of the 1st meeting of the Elgin Area Primary Water
Supply System Joint Board of Management, from the meeting held on
January 31, 2019, BE NOTED AND FILED. CARRIED

Motion Passed

3. Consent Items
3.1 Quarterly Compliance Report (4th Quarter 2018: October - December)

CREVITS AND PRESTON

That, on the recommendation of the Chief Administrative Officer, the
report dated March 7, 2019, with respect to the general, regulatory and
contractual obligations of the Elgin Area Primary Water Supply System, for
October to December 2018, BE RECEIVED. CARRIED
3.2 Environmental Management System and Quality Management System
CREVITS AND PRESTON
That, on the recommendation of the Chief Administrative Officer, the report dated March 7, 2019, with respect to the Environmental Management System and Quality Management System for the Elgin Area Primary Water Supply System, **BE RECEIVED. CARRIED**

Motion Passed

3.3 Capital Status Report
CREVITS AND PRESTON
That, on the recommendation of the Chief Administrative Officer, the following actions be taken with respect to Elgin Area Primary Water Supply System capital projects:

- a) projects EA4108 Revenue Meter Replacement Program, EA4109 Plant Reservoir Repairs, EA4114-17 Annual Maintenance (2017), EA4119 WTP Tunnel Repair, EA4139 Control Panel/Wire Cleanup, EA4146 Garage Door Replacement and EA4154 Polymer System Upgrades **BE CLOSED**, with the surplus funds, in the approximate amount of $408,027.00, released to the Board's Reserve Funds; and,

- b) the report, dated March 7, 2019, with respect to the above-noted capital projects, **BE RECEIVED. CARRIED**

Motion Passed

4. Items for Discussion
4.1 Elgin Water Board Meeting Times
PELOZA AND CREVITS
That a change in the starting time for future Elgin Area Primary Water Supply System Joint Board of Management meetings to 11:00 AM **BE IMPLEMENTED**, starting with the June 6, 2019 meeting; it being noted that refreshments will continue to be served prior to the start of the meetings. **CARRIED**

Motion Passed
4.2 Ministry of the Environment, Conservation and Parks Inspection Report
HILLIER AND PELOZA
That, on the recommendation of the Chief Administrative Officer, the report dated March 7, 2019, with respect to the Ministry of the Environment, Conservation and Parks (MECP) annual inspection, **BE RECEIVED. CARRIED**

Motion Passed

4.3 EA2180 Elgin Terminal Reservoir Emergency Repairs
HILLIER AND STEVENSON
That, on the recommendation of the Chief Administrative Officer, the report dated March 7, 2019, with respect to project EA2180 Elgin Terminal Reservoir Emergency Repairs, **BE RECEIVED. CARRIED**

Motion Passed

4.4 Project EA4160 - Non-Revenue Flow Meters - Status Update
CREVITS AND PELOZA
That, on the recommendation of the Chief Administrative Officer, the following actions be taken with respect to the continuation of the Non-Revenue Flow Meter Renewal Project (Capital Project EA4160):

a) an increase in the budget for the above-noted project, in the amount of $50,000.00, for a total project budget of $125,000.00, **BE APPROVED**, with the additional funds being drawn from the Asset Replacement Reserve Fund; and,

b) the report dated March 7, 2019, with respect to the above-noted project, **BE RECEIVED. CARRIED**

Motion Passed

5. Deferred Matters/Additional Business
None.
6. **Next Meeting Date**
   June 6, 2019

7. **Adjournment**
   The meeting adjourned at 5:43 PM.
To: Chair and Members
Elgin Area Primary Water Supply System Board of Management

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

Subject: Quarterly Compliance Report (1st Quarter 2019: January - March)

RECOMMENDATION

That the Quarterly Compliance report with respect to the general, regulatory and contractual obligations of the Elgin Area Primary Water Supply System BE RECEIVED for the information of the Board of Management; it being noted that there was one Adverse Water Quality Incident reported in the 1st quarter of 2019.

EXECUTIVE SUMMARY

Since the previous report to the Board, there were no new or proposed regulatory changes that may have a significant impact on the Elgin Area Primary Water Supply System (EAPWSS).


There was one Adverse Water Quality Incident (AWQI) reported by the operating authority and the third-party accredited laboratory during this quarter. Upon further investigation, with the participation of the laboratory, it was determined that the sample was an untreated raw water sample mistakenly labeled as a treated water sample.

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 a complete list of all applicable regulatory and contractual obligations.
REGULATORY ISSUES

Recent Regulatory Changes: At the time of drafting this report there were new regulatory changes for this reporting period, however without significant impact on the EAPWSS.

- Regulation Decision: Environmental Emergency (E2) Regulations, 2019 under the Canadian Environmental Protection Act, 1999

Environment and Climate Change Canada (ECCC) has finalized the new Environmental Emergency (E2) Regulations which will repeal and replace the current E2 Regulations, effective August 24, 2019. The Regulations require those who own or have the charge, management or control of a listed substance to submit a notification to ECCC, and, if they meet certain threshold quantities, prepare and periodically test an E2 plan. The final regulations add 33 new substances to the list of regulated substances. They clarify and strengthen requirements for emergency planning and public notification before, during and after an environmental emergency. The regulations introduce obligations to report periodically on facilities, substances, and E2 plans, as well as to activate the E2 plan in the case of an emergency.

Impacts to the EAPWSS:
Currently, the only substance in the E2 Regulations which is applicable to the EAPWSS is chlorine gas. Chlorine gas remains on the regulated list of substances, and the EAPWSS has already addressed the requirements for this substance.

Diesel fuel has now been added to the list of regulated substances. However, there is an exclusion for diesel fuel that is used to generate power at the facility where it is located, provided quantity limits are not exceeded. The diesel fuel on site at the EAPWSS is used for emergency back-up power generation, and the quantity on site does not meet the threshold requirements of the regulation. Therefore, the EAPWSS will not be required to prepare E2 Plans for diesel fuel.

In 2016, when changes to the regulations were first proposed, one of the new substances proposed to be added to the regulated list of substances was sodium hydroxide (ie. caustic soda) which the EAPWSS has on site. In their regulation decision, ECCC decided not to add certain corrosive substances to the regulations, including sodium hydroxide solution. ECCC determined that certain substances are more appropriately managed by a variety of existing controls, such as health and safety legislation. As a result of this change, the EAPWSS is not required to prepare an E2 Plan for sodium hydroxide. Notwithstanding, under the system’s ISO14001 Environmental Management System (EMS), procedures related to the delivery, handling and emergency spill response for sodium hydroxide are already in place.

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

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 Incident (AWQI): There was one AWQI reported by both the operating authority and third-party accredited laboratory during this quarter. On January 6, 2019 the laboratory notified the operating authority that a treated water sample taken on January 4, 2019 had tested positive for both E. Coli and total coliforms. Both the laboratory and operating authority notified the area Health Units and Ministry of the Environment, Conservation and Parks (MECP) as required by regulation. The operating authority immediately completed a thorough investigation into the incident. With the assistance of the laboratory, it was determined that the sample submitted was actually an untreated raw water sample, and not a treated water sample as indicated on the sample bottle label. The root cause of the incident was sampling error (ie. personnel error). All resample results were clear, and the incident was resolved.

O.Reg. 170/03, Section 11 “Annual Reports”: Under the Drinking Water Systems Regulation (O.Reg. 170/03), an Annual Report for the EAPWSS is required to be prepared by February 28th of each year. The report summarized water quality and maintenance information for the 2018 calendar year. This report was completed by Ontario Clean Water Agency (OCWA), the contracted operating authority for the EAPWSS. Although the report is no longer required to be submitted to the MECP, the EAPWSS is required to provide copies of the report to drinking water systems that obtain water from this system. The Annual Report was forwarded to the member municipalities on February 20, 2019. The Annual Report has also been posted on the Water Systems' website at https://huronelginwater.ca/wp-content/uploads/2019/02/2018_ELGIN_Annual_Report-Final.pdf for public information.
O.Reg. 170/03, Section 22 “Summary Reports for Municipalities”: Under the Drinking Water Systems Regulation (O.Reg. 170/03) a summary report is required by March 31st of each year which:

- Lists the requirements of the Act, the regulations, the system’s approval and any order that the system failed to meet at any time during the period covered by the report, and the duration of the failure. For each failure referred to, a description of the measures that were taken to correct the failure is required.
- In order to allow the system’s owner to “assess the capability of the system to meet existing and planned uses of the system”, provide a summary of the quantities and flow rates of the water supplied, including monthly average and maximum daily flows and daily instantaneous peak flow rates, with a comparison to the systems rated capacity.

This report was also completed by OCWA. The Summary Report was forwarded to the member municipalities of the EAPWSS on March 21, 2019. The report has been posted on the Water Systems’ website at https://huronelginwater.ca/wp-content/uploads/2019/03/2018-EAPWSS-Compliance-Report-FINAL.pdf for public information. All Summary Reports are available for viewing at the Elgin Area Water Treatment Plant and at the Board’s Administration Office in London. Copies of all reports are available to the public upon request and free of charge as required by O.Reg. 170/03.

Compliance Inspections: There were no compliance inspections conducted during the reporting period.
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 2019 first quarter Contract Report was received from OCWA on April 30, 2019 and is scheduled to be discussed at the quarterly administration meeting between Board staff and OCWA on May 24, 2019. Copies of the monthly Operations and Maintenance Reports, or quarterly Contract Reports are available at the Board’s Administration Office in London upon request.

This report was written by Erin McLeod, Quality Assurance and Compliance Manager.

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

Recommended by:
Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer
To: Chair and Members  
Elgin Area Primary Water Supply System Board of Management  

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

Subject: Environmental Management System and Quality Management System  

RECOMMENDATION  
That the following report with respect to the Environmental Management System and Quality Management System for the Elgin Area Primary Water Supply System BE RECEIVED 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 October 2017 and was recommended for registration to the ISO 14001:2015 standard for a three-year period (ending in 2020). 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)  
In 2006, the Drinking Water Quality Management Standard (DWQMS) was integrated with the existing EMS and the combined EMS/QMS is maintained by the contracted Operating Authority. The Safe Drinking Water Act (SDWA) and the water system’s Municipal Drinking Water Licence (MDWL) require that an accredited Operating Authority be in operational charge of the drinking water system. In order to become accredited, the Operating Authority must utilize and maintain an Operational Plan that meets the requirements of the DWQMS and must undergo an external accreditation audit. OCWA received full scope DWQMS re-accreditation in October 2016 and is currently accredited for the three-year period ending in 2019.
**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 management team of the Board 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.

In order to carry out more effective Management Review meetings, the Board’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 April 3, 2019. The meeting minutes are attached to this report as Appendix A for the information of the Board.

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

A QMS Internal Audit was conducted on April 25-26, 2019 and the pending audit report will be discussed at the next Management Review meeting scheduled for June 17, 2019. The audit report summary will be included in a future report to the Board.

**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 SAI Global. External audits review all aspects of the EMS or QMS, including the internal audits, subsequent management reviews, and corrective action processes.
There were no external audits conducted during this reporting period.

**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 taking corrective and preventive actions, preferably preventing problems before they occur. The Internal Audit process and Management Review are the two main drivers for identifying potential problems and opportunities for improvement for the EAPWSS and implementing corrective actions. 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 action items should not be construed as compliance failures, but rather an action to be undertaken which will improve the EAPWSS's 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 PLAN-DO-CHECK-ACT 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 outlines the general process.

![Plan-Do-Check-Act Diagram](image-url)
Since the last report to the Board, the following summarizes new action items that have been added to the EMS/QMS action item tracking system:

- Two (2) new proactive action items were added as a result of the April 3, 2019 Management Review meeting.
- Nine (9) new action items were added as a result of corrective and preventive action forms completed by staff.

As of May 2, 2019, there are currently 14 open action items in the system. Action items are prioritized and addressed using a risk-based approach, and deadlines established given reasonable timeframes and resources that are available. Board staff are pleased with the performance of the corrective and preventive action process and have no concerns with the number of open action items.

All outstanding action items in the system are driven by continual improvement. All open action items are currently either proactive or relate to opportunities for improvement. None of the open action items relate to regulatory issues (i.e. non-compliances), management system non-conformances, or water quality issues.

**CONCLUSION**

The Internal Audits and frequent Management Review meetings continue to effectively identify 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.

This report was prepared by Erin McLeod, Quality Assurance & Compliance Manager with the assistance of Arlene Tanashi, Compliance Coordinator.

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

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

**Attachments:**  
**Appendix A** – Management Review Meeting Minutes (April 3, 2019)
**APPENDIX A: MANAGEMENT REVIEW MEETING MINUTES (APRIL 3, 2019)**

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

<table>
<thead>
<tr>
<th>Date</th>
<th>April 03, 2019</th>
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<tbody>
<tr>
<td>Time</td>
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<tr>
<td>Location</td>
<td>Regional Water Supply Boardroom</td>
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<td>Attendees</td>
<td>Andrew Henry (RWS), Erin McLeod (RWS), Blair Tully (OCWA), Denny Rodrigues (OCWA), Simon Flanagan (OCWA), Greg Henderson (OCWA), Arlene Tanashi (RWS)</td>
</tr>
</tbody>
</table>

**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 – December 11, 2018**

   The minutes are posted to SharePoint. The minutes were approved.

2. **EAPWSS - Ministry of the Environment, Conservation and Parks (MECP) Inspection – November 13, 2018**

   The inspection report was issued January 31, 2019. The report was based on an announced focused physical inspection of the system. The inspection rating was 100.00%.

   There were zero (0) non-compliances identified in the inspection report. There were zero (0) Best Management Practices (Recommendations) identified.

3. **LHPWSS - Ministry of the Environment, Conservation and Parks (MECP) Inspection – December 5, 2018**

   The inspection report was issued March 7, 2019. The report was based on an unannounced detailed physical inspection of the system. The inspection rating was 100.00%.
There were zero (0) non-compliances identified in the inspection report. There were zero (0) Best Management Practices (Recommendations) identified.

4. **EAPWSS - Environmental Compliance Internal Audit (January 24, 2019)**

The purpose of the audit was to verify compliance with select environmental legislation and other compliance obligations at the EAPWSS. A summary of the audit findings was circulated. Zero (0) non-conformances (NC) and zero (0) Opportunities for Improvement (OFI) were noted. The positives noted in the audit summary were highlighted for Top Management.

5. **LHPWSS – Environmental Compliance Internal Audit (January 29, 2019)**

The purpose of the audit was to verify compliance with select environmental legislation and other compliance obligations at the LHPWSS. A summary of the audit findings was circulated. Zero (0) non-conformances (NC), two (2) Opportunities for Improvement (OFI) and two (2) Recommendations were noted. Discussion ensued and suggested additions and changes to action items and deadlines will be incorporated into the CAF tracking spreadsheet. The positives noted in the audit summary were highlighted for Top Management.

6. **LHPWSS – Middlesex County Fire Safety Inspection (February 22, 2019)**

Komoka-Mt. Brydges Pumping Station (KB1) and McGillivray Pumping Station were inspected. There were zero (0) violations found. A copy of the Fire Safety Inspection Report has been uploaded to the Compliance Library in SharePoint.

7. **Incidents of Adverse Drinking Water Tests (LH & EA)**

Adverse Water Quality Incidents (AWQI) were last discussed at Management Review in May 2018. There have been zero (0) AWQIs for LHPWSS. There was one (1) AWQI for EAPWSS.

The EAPWSS AWQI was reviewed and discussed. The AWQI reported involved bacteriological analysis of a sample dated January 4, 2019. The root cause analysis determined that the sample was mislabelled as treated water when in fact it was a raw water sample (operator error). A Corrective Action Form was completed for the incident documenting root cause analysis and appropriate information for corrective action. The AWQI will be included in the next Quarterly Compliance Report to the Board (1st Quarter 2019: January – March).
8. **Deviations from Critical Control Point Limits and Response Actions – 2018**

**Summary (LH & EA)**

Handouts Provided: WaterTrax Alert Action Reports were generated for each drinking water system from January 1, 2018 to December 31, 2018. This provided a summary of all WaterTrax alerts received in 2018.

LHPWSS: Total of 16 alerts received. The alerts were reviewed. Discussion ensued. No changes are required to the alert settings at this time. Operators have continued to provide detailed comments to the alerts to explain deviations.

EAPWSS: Total of 138 alerts received. This represents an increase from last year, however the Senior Operations Manager is aware and will be conducting a comprehensive review. The details of the alerts were reviewed. Discussion ensued. Operators have continued to provide detailed comments to the alerts to explain deviations.

**Action Item (EA):** Complete a review and validate WaterTrax Alert Settings and provide recommendations for updates, if required. Simon Flanagan. Deadline: December 31, 2019.

9. **Results from Board Meetings – January 31, 2019 and March 7, 2019**

**January 31, 2019 LHPWSS Board Meeting**

Letter from ECCC regarding chlorinated effluent discharges: There was a question from the Board regarding other potential contaminants that could be discharged to lake. Staff responded that any spills, whether accidentally or as part of our operations (e.g. RMF), could impact air/land/water and would be an issue. We minimize our risk to the extent possible. There was general discussion on the coordination with the U.S. Great Lakes partners.

Quarterly Compliance Report: There was general discussion about Ontario’s Open for Business Action Plan and how this might impact the drinking water system. Any industry has potential for risk. The Boards will work with municipalities as required. The drinking water industry (e.g. OWWA, OMWA) has expressed their caution. General discussion on representation at the local level.

EMS/QMS Report:

The Dec. 11, 2018 management review meeting minutes included the Lake Erie Harmful Algal Bloom seasonal assessment. Staff provided clarification on the definition of severity as being a combination of size as well as toxicity.

The compliance obligations update noted that Health Canada is introducing a guideline for barium in drinking water. There was a question from the Board asking whether there is an increasing trend for barium, and whether it is now more prevalent in the environment. [Noted at management review: Staff trended this after the meeting, there is no increasing trend for barium for either EAPWSS or LHPWSS.]
January 31, 2019 EAPWSS Board Meeting
Letter from ECCC regarding chlorinated effluent discharges: Same comments as above.
Quarterly Compliance Report: The report was received for information.
EMS/QMS Report: The report contained a summary of the findings for the EMS
External Audit conducted by SAI Global on October 11-12, 2018. The Board requested clarification on the three OFIs noted in the audit report. Staff provided explanation on the findings and noted the continual improvement process. [Noted at management review: For future presentation of external audit results, we will more clearly distinguish each OFI, so they do not inadvertently appear to be related items.]

March 7, 2019 LHPWSS Board Meeting
The Quarterly Compliance Report and EMS/QMS Reports were received for information.
March 7, 2019 EAPWSS Board Meeting
The Quarterly Compliance Report was received for information.
EMS/QMS Report: Overall the Board was pleased with the audit results (zero non-compliances) and noted that we are going above and beyond to ensure we meet environmental requirements. There were some questions regarding the Environmental Compliance Audit and the reference to “areas of concern”. It was explained that this is terminology is from the environmental compliance software and the Board can think of it as an “area of focus” for the audit. [Noted at management review: Use different wording in future environmental compliance reports.]
MECP Inspection Report: The 100% rating was noted by the Board and congratulations to staff on great work.

10. Compliance Obligations Update

<table>
<thead>
<tr>
<th>Title</th>
<th>Information Notice: Approval of the amended assessment reports and source protection plans for the Ausable Bayfield source protection area and the Maitland Valley source protection area</th>
</tr>
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<tbody>
<tr>
<td>Source</td>
<td>EBR Posting (MECP)</td>
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<tr>
<td>Date Posted/Notice Received</td>
<td>February 5, 2019</td>
</tr>
<tr>
<td>Comments Due</td>
<td>N/A</td>
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**Summary**  
MECP has approved amendments to the assessment reports and source protection plans. The amendments update wellhead protection areas around 6 municipal wells, and revise risk management policies for consistency and to assist with implementation. Minor changes to the risk management plan policies align with timelines in neighbouring areas and allow flexibility for which municipal applications require approval by a risk management official.

**Notes**  
No impacts to the LHPWSS. The amendments relate to wellhead protection areas.

<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th><strong>Environmental Emergency (E2) Regulations, 2019</strong></th>
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<tbody>
<tr>
<td><strong>Source</strong></td>
<td>Environment and Climate Change Canada (ECCC)</td>
</tr>
<tr>
<td><strong>Date Posted/Notice Received</strong></td>
<td>March 6, 2019</td>
</tr>
<tr>
<td><strong>Comments Due</strong></td>
<td>N/A</td>
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<tr>
<td><strong>Summary</strong></td>
<td>The regulations have been finalized and come into force on August 24, 2019. Until then the previous regulations are in force. The final regulation adds 33 substances to the list of regulated substances. If specific quantity and/or container capacity thresholds are met or exceeded, there are requirements for notification to ECCC and information submission, and the preparation and exercising of E2 plans.</td>
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<tr>
<td><strong>Notes</strong></td>
<td>In 2016 when the regulations were first proposed, 49 new substances were proposed to be added to the list, including sodium hydroxide. ECCC has decided not to add certain corrosive substances to Schedule 1, including sodium hydroxide solution. As a result of this change, the LHPWSS and EAPWSS will not be required to prepare E2 Plans for sodium hydroxide. Diesel fuel has been added to the list. However, there is an exclusion for diesel fuel that is used to fuel a heating appliance or to generate power at the facility where it is located, provided quantity limits are not exceeded. The LHPWSS and EAPWSS will not be required to prepare E2 Plans for diesel fuel.</td>
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<tr>
<th><strong>Title</strong></th>
<th><strong>Guideline Technical Document - Lead</strong></th>
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<tr>
<td><strong>Source</strong></td>
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<tr>
<td><strong>Date Posted/Notice Received</strong></td>
<td>March 11, 2019</td>
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<tr>
<td><strong>Comments Due</strong></td>
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| Summary | Health Canada updated its drinking water guideline to reduce the maximum acceptable concentration (MAC) for lead at the tap from 0.01mg/L (10ug/L) to 0.005mg/L (5ug/L).

Health Canada offered the following explanation for application of the new guideline: “The MAC for lead is established based on feasibility rather than only health protection. This is because lead is introduced in drinking water in the distribution and plumbing systems, after the treated water leaves the treatment plant. As current science cannot identify a level under which lead is no longer associated with adverse health effects, lead concentrations in drinking water should be kept as low as reasonably achievable (ALARA).” |
| Notes | |

| Title | **Study Report: Market Characterization & Conservation Potential for Ontario’s Drinking Water & Wastewater Treatment Plants** |
| Source | Independent Electricity System Operator (IESO) |
| Date Posted/ Notice Received | March 1, 2019 |
| Comments Due | N/A |
| Summary | Water and wastewater treatment represent the largest energy use for most municipal governments, so the IESO commissioned a report that advises how these costs can be reduced. The report presents municipal leaders and water treatment facility operators with options and recommendations to reduce energy use, including operational and systemic changes, shifting energy use from peak to off-peak times and better use of existing energy saving opportunities. |
| Notes | Noted for information, as an updated 5 year Energy Conservation and Demand Management Plan, as required under O.Reg. 507/18, is due on July 1, 2019. |
### Title: Consultation – Cadmium in Drinking Water

**Source:** Health Canada  
**Date Posted/Notice Received:** March 19, 2019  
**Comments Due:** May 21, 2019

**Summary:** The intent is to update the current drinking water guideline and guideline technical document, which was last updated in 1986. This new document takes into consideration newer scientific studies and assessments, updated data and information. The document proposes to reaffirm a maximum acceptable concentration (MAC) of 0.005 mg/L (5 µg/L) for cadmium in drinking water.

**Notes:**  
In Ontario, the MAC for cadmium is also 0.005 mg/L.  
In the last 5 years (2014-2019):  
- Elgin WTP Treated water – max. value 0.000037 mg/L;  
- Huron WTP Treated Water – max. value 0.000006 mg/L;

### Title: Consultation: Review of Total Coliforms in Drinking Water

**Source:** Health Canada  
**Date Posted/Notice Received:** March 19, 2019  
**Comments Due:** May 21, 2019

**Summary:** The current guideline was published in 2012. It establishes a MAC for total coliforms in water leaving the treatment plant of none detectable per 100 mL. The guideline also states that total coliforms should be monitored in the distribution system because they are used to indicate changes in water quality. Detection of total coliforms from consecutive samples from the same site or from more than 10% of the samples collected in a given sampling period should be investigated (Health Canada, 2012).

Health Canada reviewed the scientific literature related to total coliforms in 2017. Based on this review, a full update of this guideline technical document is not required at this time, as science continues to support the MAC established in 2012.

**Notes:**  
In Ontario, the MAC for total coliforms is none detectable. This applies to both treated water and distribution samples.

### Title: Consultation: Guidance on Natural Organic Matter in Drinking Water

**Source:** Health Canada  
**Date Posted/Notice Received:** March 19, 2019  
**Comments Due:** May 21, 2019
Information on natural organic matter (NOM) in drinking water has been assessed with the intent of establishing a guidance document.

NOM is an extremely complex mixture of organic compounds and is found in all groundwater and surface waters. Although NOM has no direct impact on health, it affects the efficacy of drinking water treatment processes and consequently the safety of drinking water. NOM may also affect consumer satisfaction because it can contribute to undesirable colour, tastes and odours in drinking water.

Health Canada completed its review of NOM in drinking water and the impact that it can have on drinking water treatment processes. This guidance document reviews and assesses risks associated with the impact of NOM on drinking water treatment processes and the safety of drinking water.

Although the numerous organic compounds that contribute to NOM cannot be measured directly, there are a number of surrogates that can be used to provide an indication of the NOM concentration.

For research purposes, the EAPWSS and LHPWSS collect data on dissolved organic carbon (DOC), total organic carbon (TOC), UV absorbance, and colour.

11. **QMS Operational Plan Currency, Content and Updates (LH & EA)**

OCWA provided an update on the status of documents included in the Operational Plan.

The Emergency Standard Operating Procedures (ESOPs/HSOPs) are 90% complete but there is an outstanding administrative component to ensure that revisions are properly uploaded into SharePoint.

Going forward, operational staff will continue reviewing and updating the operational Standard Operating Procedures (SOPs) to better reflect current practice. The 2019/2020 focus will also include the Operations and Maintenance Manuals.

12. **Communications from Interested Parties**

a) LHPWSS: Water Quality Data Inquiry – South Huron (Feb 15, 2019): A consumer requested water quality data from the municipality, and this was referred to the LHPWSS. The consumer had requested data for some
parameters in addition to those which are included in the Quarterly Water Quality reports posted to the website. This information was provided. OCWA has since modified the quarterly reporting template to add those additional parameters of interest. No further action.

b) LHPWSS: Consumer Request – Flow Data (March 4, 2019): An inquiry from a resident/consumer of Lambton Shores was received. It related to how much flow/volume was going from the LHPWSS to Lambton Shores distribution system. The monthly flow/volume from the revenue meter readings was provided to the satisfaction of the consumer. No further action.

c) EAPWSS: Hawk Cliff Raptor Banding Station – 2018 Newsletter: The Hawk Cliff Banding Station is a volunteer organization and landowners allow the use of their property to conduct their banding programs. The 2018 Annual Newsletter was received in March 2019 and included a thank you to the EAPWSS and staff for extending their generosity in hosting the banders.

d) LHPWSS & EAPWSS – Residuals Inquiry – A Board member requested information as to the amount of residuals that were being trucked to landfill/disposal site from each Residuals Management Facility (RMF). The information was provided.


e) EAPWSS – Consumer Feedback – There have been no specific QMS related communications in the past year.

13. Continual Improvement/Suggestions from Staff

Staff suggested that chemical tracking be consistently instituted for the LHPWSS pumping stations. Currently the consumption of sodium hypochlorite is tracked for the Exeter-Hensall Pumping Station, but chlorine gas is not tracked at Komoka Mount Brydges Pumping Station (KMBPS).

Action Item (LH): OCWA will investigate whether chlorine gas consumption is able to be tracked at KMBPS. Concurrently review the need to re-chlorinate at this location. Denny Rodrigues and Greg Henderson. Deadline: September 30, 2019.

There was general discussion about secondary disinfection requirements by member municipalities. Currently, South Huron receives a boosted level of chlorine from the primary system to ensure adequate maintenance of chlorine residual throughout their distribution system. The primary systems can assist with short terms needs, but this is not a long-term solution. Distribution systems should have their own means to provide the required residual chlorine.
14. Notification to Spills Action Centre (SAC) - EAPWSS

As part of ongoing continual improvement of the EMS/QMS, personnel are proactively engaged and appropriately reporting incidents related to environmental and quality issues.

On December 31, 2018 the surge tank overflowed at the EAPWSS Water Treatment Plant. The details of this incident were discussed. A Corrective Action Form (CAF) was completed documenting appropriate information for corrective action. Action items will be added to the tracking spreadsheet.

15. Environmental Performance (LH & EA)

- EAPWSS – Energy Savings Measures. New garage doors were installed at the main plant and low lift. The sealing system minimizes air infiltration and thermal transference. OCWA has observed that since installation of the new doors the unit heaters do not run as often in the garages.

- EAPWSS – Filter Backwash Volumes. An analysis and comparison of data was presented for each of the four filters. The trendlines show that the average volume of backwash water used before and after filter rebuilding was reduced significantly (almost 50% on average). Trending also indicates a levelling off of the volume used. Another year or two of trending will confirm this. Energy savings are realized due to shorter backwash pump run times and shorter air scour blower run times. Also, of note as a result of this reduced water usage, is that a reduced volume of water is now going to RMF for treatment. This results in a savings in energy as well. **Action Item (EA):** Total volume of each filter per year to be tracked. Erin McLeod. Deadline: September 30, 2019.

- LHPWSS WTP – Natural Gas Trend – A graphical summary of the Water Treatment Plant Natural Gas Consumption was provided. This summary showed that since 2011-12 consumption has continued to increase. OCWA provided a summary explanation of reasons to explain the continued increases. In addition, opportunities were suggested for consideration for reduction of natural gas usage.

- EAPWSS WTP – Natural Gas Trend – A graphical summary of the Water Treatment Plant Natural Gas Consumption was provided. This summary showed that since 2011-12 consumption at the Water Treatment Plant has achieved steady state. However, usage overall has increased due to the Residuals Management Facility (RMF) start up in 2016. Tracking will continue based on the
sub metering in place. OCWA is looking at optimizing air exchanges for the RMF.

16. **Status of Action Items (LH & EA)**

Action item summaries were provided.
- LHPWSS: 17 incomplete of which 14 are overdue
- EAPWSS: 13 incomplete of which 9 are overdue

As of March 28, 2019, both systems have an overall action item completion of 97% (includes all action items 2012-2018). This is the best % completion seen for the action items. All outstanding action items in the system are driven by continual improvement and are either proactive or relate to opportunities for improvement. None of the open action items relate to regulatory issues, management system non-conformances, or water quality issues.

17. **Status of Action Items Identified Between Management Reviews (LH & EA)**

A Management of Change meeting was conducted April 3, 2019. At the next Management Review meeting in June 2019, a summary for each system will be provided. Action items will be discussed, and deadlines finalized at that time.

A summary of Corrective Action Forms (CAFs) completed during the period July 2018 – March 2019 was provided to Top Management for awareness. As part of Continual Improvement, all CAFs are now being added to the Corrective Action Tracking spreadsheet to ensure action items are tracked and verification of effectiveness occurs.

18. **Upcoming Internal Audit Schedule**

The EMS/QMS Internal Audit schedule has been set and updated for the first half of 2019.

The next EAPWSS QMS Internal Audit will be April 25-26, 2019 (confirmed post-meeting). The next LHPWSS QMS Internal Audit will be May 2-3, 2019.

19. **New Business**

At the EAPWSS, a capital project is underway to install an additional chlorine analyzer at the Low Lift to monitor the Plant Drain effluent in addition to the regulatory chlorine analyzer located at the RMF. Total Chlorine Residual (TCR) will be compared from the two monitoring points. Pending the results of the monitoring, the EAPWSS may approach the MECP regarding proposed changes to the Municipal Drinking Water Licence.
Discussion took place regarding the EAPWSS decommissioning of Pipeline A on April 15, 2019. Management of Change has been completed.

Greg Henderson announced that Alison McCann is the Operations & Compliance Team Lead at LHPWSS effective April 29, 2019.

Next Meeting: Monday, June 17, 2019.
To: Chair and Members  
Elgin Area Primary Water Supply System Board of Management  

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

Subject: Water System Operation - Contract Status Update  

RECOMMENDATION

That this report with respect to the status of the contract with the Ontario Clean Water Agency as the contracted operating authority BE RECEIVED for the information of the Elgin Area Primary Water Supply System Board of Management.

PREVIOUS AND RELATED REPORTS

June 7, 2018 Water System Operation – Contract Status Update  
June 8, 2017 Operations and Maintenance Services Agreement – Negotiation of Term Extension  
December 1, 2016 Operations and Maintenance Services Agreement – Negotiation of Term Extension  
June 2, 2016 Water System Operation – Contract Status Update  
March 3, 2016 Operating and Maintenance Services Agreement – Contract Term  
June 4, 2015 Water System Operation – Contract Status Update  
October 2, 2014 Water System Operation – Contract Status Update  
January 19, 2012 Water System Operation – Contract Award (Concurrent Meeting)  

BACKGROUND

On January 19, 2012 the Board of Management for the Elgin Area Primary Water Supply System (EAPWSS), concurrently and jointly with the Board of Management for the Lake Huron Primary Water Supply System (LHPWSS), awarded the contract for the management, operation and maintenance of both drinking water systems to the Ontario Clean Water Agency (OCWA). OCWA began operating the EAPWSS on July 1, 2012. The contract with OCWA was for a five year term, with a five year optional extension.

On June 8, 2017 the Board Chair and Chief Administrative Officer (CAO) were authorized by the Board to execute the Operations and Maintenance Service Amending Agreement with OCWA to extend the term of the agreement for the additional five-year period. The Amending Agreement for the second five-year term took effect on July 1, 2017 and the term ends on
December 31, 2022. The Amending Agreement allows for one additional five-year extension at the option of the Board.

DISCUSSION

The service agreement with OCWA contains a significant number of deliverables. This report does not attempt to cover the status of all deliverables, rather it provides an overview of some of the more notable items.

**General Contract Deliverables**
Under the service agreement, OCWA is required to provide several regular reports to Board staff, including:
- Monthly Operations and Maintenance Report
- Quarterly Contract Report
- Quarterly Water Quality Report
- Quarterly Financial Report
- Quarterly Health & Safety Activities Report

Board staff and OCWA currently meet monthly to review the day-to-day management, operations and maintenance activities for the water supply system. The Board’s CAO, Director, and the senior management of OCWA also meet quarterly to discuss any financial, contractual compliance and administrative-level issues. All of the above noted reports and related meeting minutes are available from the Regional Water Supply office in London upon request.

**Employee Retention Incentive**
Under the service agreement, OCWA is entitled to receive an annual employee retention incentive payment if all critical staff positions that were filled, and staff turnover for these positions was no more than two persons during the calendar year. This incentive was included in the service agreement in order to ensure adequate numbers of critical staff were available and incent minimal turnover, which was a significant issue with the previous contracted operating authority.

In 2018, OCWA achieved these requirements for the EAPWSS and received the $30,000 employee retention incentive payment.

**Incentive Payment**
At the end of each contract year, OCWA is entitled to receive a performance incentive payment of up to $100,000, subject to any deductions outlined in the service agreement. Deductions could result from a number of specified issues, such as providing deficient or late reports, failure to meet emergency response requirements, failure to deal with complaints, failure to meet water quality performance criteria, etc.
In 2018, there were no deductions to the incentive payment. The water quality performance criteria specified within the service agreement was continuously met during the period. The performance incentive payment is intended to promote performance superior to minimum regulatory standards and best practices. In total, OCWA received the full $100,000 incentive payment for the EAPWSS.

**Service Fee Adjustment**

The service agreement identifies projected annual treated water volumes throughout the contract term, upon which the annual service fee is based. At the end of each contract year, if the actual volume is greater than 105% or less than 95% of the projected volume, an adjustment is made to the service fee (either a credit or additional cost).

In 2018, the actual volume for the EAPWSS was 97.28% of the projected volume. This was within the accepted range therefore no adjustments to the service fee were required.

**CONCLUSION**

Board staff will continue to work closely with the operating authority to monitor performance, and ensure deliverables under the service agreement. Any contractual issues are discussed at the quarterly operations meetings between OCWA and Board staff.

Information for this report was provided by Erin McLeod, Quality Assurance & Compliance Manager.

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

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer
To: Chair and Members  
Elgin Area Primary Water Supply System Board of Management

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

Subject: Quarterly Operating Financial Status Report

RECOMMENDATION

That this report regarding the Quarterly Operating Financial Status of the Elgin Area Water Supply System BE RECEIVED by the Board of Management for information.

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 expenses and/or revenues from a previous fiscal year.

A high-level summary of incurred expenses and revenues for the water supply system is attached to this report as Appendix A. The summary provided in this report corresponds with the Revenue and Expenditure Summary within the 2019 Budget Report presented and approved at the October 4, 2018 meeting of the Board. The reported expenditures and revenues may be subject to adjustments prior to year-end and the creation of the audited financial statements.

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:

- Accumulated revenue is non-linear and directly proportional to water demands within the distribution systems of the member municipalities. The lowest monthly volumes (and corresponding revenue) typically occur in February, while the highest monthly volumes typically occur in July and August.

- Operating Costs reflect the total direct cost of the contracted operation of the water treatment and transmission system, as well as the cost of electricity.
• Variations in operating costs are largely attributed to actual versus anticipated energy costs throughout the year, and any adjustments to the service fee paid to the contracted operating authority at the end of the fiscal year.

• Administration and Other Expenses include (but not limited to) salaries and wages for Board staff, office lease and overhead operating expenses, insurance, IT and network communications, and incurred administrative support services including charges issued by the City of London in providing support services to the Board.

• Contributions to the Reserve Funds occur at the end of the fiscal year

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

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

Attachments: Appendix A – Operating Financial Status Summary
**Quarterly Financial Summary Report**

Elgin Area Water Supply system  
1st Quarter 2019 (January 1 to March 31)  
($,000's)

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<td>Contributions to Reserve Funds</td>
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<td>3,404</td>
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<tr>
<td>Total Expenditures</td>
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<td>2,435</td>
<td>10,100</td>
<td>2,393</td>
</tr>
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</table>
To: Chair and Members  
Elgin Area Primary Water Supply System Board of Management  

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

Subject: Huron-Elgin-London-Project Clean Water – Program Completion

RECOMMENDATION

That this report regarding the completion of the Huron-Elgin-London Project Clean Water initiative BE RECEIVED by the Board of Management for information.

PREVIOUS AND RELATED REPORTS

December 1, 2016  HELP Contribution Amending Agreement – Canada  

December 3, 2015  HELP Interest Allocation  

June 12, 2014  HELP Contribution Amending Agreements  

June 3, 2010  HELP Clean Water – Contribution Agreement Bonding  

October 1, 2009  HELP Clean Water Update – October 2009  
(Execution of the Contribution Agreements with Ontario and Canada)

BACKGROUND

The Elgin Area Primary Water Supply System, in partnership with the City of London and the Lake Huron Primary Water Supply System, entered into a Contribution Agreement with the Government of Canada in June 2009 and with the Government of Ontario in March 2010 for the Huron-Elgin-London Project Clean Water (HELP Clean Water) initiative. Each of Canada and Ontario contributed nearly $50 million to nine regionally significant water-related projects which comprise the HELP Clean Water initiative. The contributions from Canada and Ontario are part of the Building Canada Fund program.

The Elgin Area Primary Water Supply System, in partnership with the City of London and the Lake Huron Primary Water Supply System, entered into a Contribution Amending Agreement with the governments of Canada and Ontario in June 2014, which revised the scope of the project. The two wind generator project components, and the landfill gas project components were removed from the HELP Clean Water initiative. In addition, the Acoustic Fibre Optic Monitoring System on the Lake Huron transmission pipeline, the Filtration System
Replacement at the Elgin water treatment plant were added, and additional scope was added related to London’s Southeast Reservoir and Pump Station project component.

The Elgin Area Primary Water Supply System, in partnership with the City of London and the Lake Huron Primary Water Supply System, entered into a Contribution Amending Agreement with the governments of Canada and Ontario in January 2017, which extend the completion date of the HELP Clean Water to March 31, 2020 and the Final Claim Date of January 31, 2019.

**DISCUSSION**

**Huron-Elgin-London-Project Clean Water**

The Huron-Elgin-London-Project Clean Water was a funding initiative created in partnership between the two regional water systems and the City of London to seek significant funding from the senior governments for regionally significant water-related projects. Over the course of the ten-year program, eight individual capital projects were completed in the total amount of nearly $167.5 million of which nearly $100 million was provided by senior government funding.

The HELP Clean Water initiative was seen to be ground-breaking in nature as it did not solicit funding through the normal municipal funding channels. Rather than funding from the senior governments which were specifically earmarked for municipal infrastructure projects, where a municipality could apply to fund one capital project, the HELP Clean Water initiative targeted the Major Infrastructure Component of the Building Canada Fund which focused on larger, strategic infrastructure projects that are of national or regional in significance.

While the regional water systems are not eligible to apply for most municipally-focused funding programs, targeting the Building Canada Fund was found to be of momentous benefit for the entire region.

**Contribution Agreements**

The Contribution Agreements with each of Canada and Ontario stipulate that before the final payment of claims can be completed and the release of any monies withheld by the senior government, the Recipient (the partnership between the Lake Huron Water Supply System, the Elgin Area Water Supply System, and the City of London) must complete and issue a Notice of Completion. In addition, a Final Project Report must be issued to Canada which provides specific project information and a summary of details of the program.

The Declaration of Completion was issued to Canada on October 31, 2018 and is attached to this report as Appendix B for the Board’s information and reference.

The Declaration of Completion was issued to Ontario on October 31, 2018 and is attached to this report as Appendix B for the Board’s information and reference.
The Final Project Report was issued to each of Canada and Ontario on March 29, 2019. The final report was more than 46MB in size and nearly 850 pages in total length.

**Payment of Final Claims**

Board Staff are currently in the process of reviewing the final reconciliation of claims made and payments received from Canada, and arranging for the final payment and release of withheld funds. A summary of the claims and payments to date, by project component of the HELP Clean Water initiative, is provided in Appendix C of this report for the information and reference of the Board.

All payments have been received by Ontario.

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

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

**Attachments:**
Appendix A: Notice of Completion – Canada
Appendix B: Notice of Completion – Ontario
Appendix C: Summary of Claims and Payments
APPENDIX A: NOTICE OF COMPLETION – CANADA

CANADA-HELP Clean Water
Building Canada – Major Infrastructure Component

Declaration of Completion

In the matter of the Agreement entered into between Her Majesty the Queen in right of Canada, as represented by the President of the Queen’s Privy Council for Canada, Minister of Infrastructure, Communities and Intergovernmental Affairs and The Corporation of the City of London, represented by the Mayor, on its own behalf and in its capacity as Administering Municipality for the Lake Huron Primary Water Supply System and Elgin Area Primary Water Supply System (collectively the “Recipient”) concerning the Huron-Elgin-London Project Clean Water (the “Agreement”).

I, Kelly Scherr, of the City of London, Province of Ontario, declare as follows:

1. That I hold the position of Managing Director of Environmental & Engineering Services and City Engineer with the City of London and Chief Administrative Officer with each of the Lake Huron Primary Water Supply System and the Elgin Area Primary Water Supply System, collectively the Recipient, and as such have knowledge of the matters set forth in this declaration and believe this declaration to be true.

2. a) That I have received the following documents for the Huron-Elgin-London Project Clean Water:

   i) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated December 16, 2018, and signed by Neil Awde, a professional engineer, for a portion of the Project component EA4023 – Elgin Residuals Management Facility; and,

   ii) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated August 2, 2017, and signed by Neil Awde, a professional engineer, for a portion of the Project component EA4023 – Elgin Residuals Management Facility; and,

   iii) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated May 22, 2012, and signed by Andrew Henry, a professional engineer, for the Project component EA4024 – Elgin Transmission Main Twinning; and,

   iv) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated August 31, 2016, and signed by Thomas Woodcock, a professional engineer, for the Project component EA4082 – Elgin Filtration System; and,

   v) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated August 21, 2017, and signed by John Armistead, a professional engineer, for the Project component EW3614 – Southeast Reservoir and Pump Station; and,

   vi) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated December 20, 2013, and signed by Andrew Henry, a professional engineer,
for a portion of the Project component LH1305 – Huron Transmission Main Twinning; and,

vii) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated March 27, 2014, and signed by Andrew Henry, a professional engineer, for a portion of the Project component LH1305 – Huron Transmission Main Twinning; and,

viii) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated December 3, 2012, and signed by David Ward, a professional engineer, for the Project component LH1326 – Huron Backup Generators; and,

ix) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated October 6, 2015, and signed by Andrew Henry, a professional engineer, for the Project component LH1368 – Huron Acoustic Fibre Optic Monitoring System; and,

x) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated February 19, 2014, and signed by Warren Saint, a professional engineer, for the Project component LH1902 – Huron Residuals Management Facility.

b) That based on the above documents and the representations made to me by the professionals identified in Section 2(a) of this declaration, I declare to the best of my knowledge and belief that the Project:

i) has been substantially completed, as described in Section B.1 (Project Description) of Schedule B (The Project) of the Agreement, having an effective date of the 3rd day of June, 2009, and amended on August 28, 2014, and amended on January 31, 2017.

ii) was carried out between the dates January 1, 2009 (start date) and October 29, 2018 (substantial completion date).

3. That all terms and conditions of the Agreement that are required to be met as of the date of this declaration have been met.

Declared at London, in Ontario this 31st day of October 2018.

Kelly Scherr, P.Eng., MBA, FEC
Managing Director, Environmental & Engineering Services & City Engineer; and,
Chief Administrative Officer, Lake Huron & Elgin Area Water Systems
APPENDIX B: NOTICE OF COMPLETION – ONTARIO

ONTARIO-HELP Clean Water
Building Canada – Major Infrastructure Component

Solemn Declaration of Completion

In the matter of the Agreement entered into between Her Majesty the Queen in right of Ontario, as represented by the Minister of Agriculture, Food and Rural Affairs ("Ontario") and The Corporation of the City of London, on its own behalf and in its capacity as Administering Municipality for the Lake Huron Primary Water Supply System and Elgin Area Primary Water Supply System (collectively the "Recipient"), as amended, concerning the Huron-Elgin-London Project Clean Water (the "Agreement"):

I, Kelly Scherr, of the City of London, in the Province of Ontario, solemnly declare as follows:

1. That I hold the position of Managing Director of Environmental & Engineering Services and City Engineer with the City of London, and the position of Chief Administrative Officer with each of the Lake Huron Primary Water Supply System and the Elgin Area Primary Water Supply System, collectively the Recipient, and as such have knowledge of the matters set forth in this declaration.

2. a) That I have received the following documents for the Huron-Elgin-London Project Clean Water:

   i) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated December 16, 2016, and signed by Neil Awde, a professional engineer, for a portion of the Project component EA4023 – Elgin Residuals Management Facility; and,

   ii) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated August 2, 2017, and signed by Neil Awde, a professional engineer, for a portion of the Project component EA4023 – Elgin Residuals Management Facility; and,

   iii) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated May 22, 2012, and signed by Andrew Henry, a professional engineer, for the Project component EA4024 – Elgin Transmission Main Twinning; and,

   iv) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated August 31, 2018, and signed by Thomas Woodcock, a professional engineer, for the Project component EA4082 – Elgin Filtration System; and,

   v) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated August 21, 2017, and signed by John Armistead, a professional engineer, for the Project component EW3614 – Southeast Reservoir and Pump Station; and,

   vi) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated December 20, 2013, and signed by Andrew Henry, a professional engineer, for a portion of the Project component LH1305 – Huron Transmission Main Twinning; and,
vii) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated
March 27, 2014, and signed by Andrew Henry, a professional engineer, for a
portion of the Project component LH1305 – Huron Transmission Main
Twinning; and,
viii) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated
December 3, 2012, and signed by David Ward, a professional engineer, for
the Project component LH1326 – Huron Backup Generators; and,
ix) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated
October 6, 2015, and signed by Andrew Henry, a professional engineer, for
the Project component LH1368 – Huron Acoustic Fibre Optic Monitoring
System; and,
x) Certificate of Substantial Performance (Form 6, Construction Lien Act) dated
February 19, 2014, and signed by Warren Saint, a professional engineer, for
the Project component LH1902 – Huron Residuals Management Facility.

b) That based on the above documents and the representations made to me by the
professionals identified in Section 2(a) of this declaration, I declare to the best of
my knowledge and belief that the Project:
i) was started on the 1st day of January, 2009; and,
ii) was “Completed”, within the meaning of this term in the Agreement, on the
29th day of October 29, 2018 (substantial completion date).

3. To the best of my knowledge, information and belief, the Project conformed with all
applicable regulatory requirements.

4. To the best of my knowledge, information and belief, that all the terms and
conditions of the Agreement that were required to be met by the Recipient as of the
date of this Declaration have indeed been met.

Solemnly declared at London, in Ontario this 31st day of October 2018.

Signed: 

[Signature]

Witnessed:

[Signature]

Kelly Schott, P.Eng., MBA, FEC
Managing Director, Environmental &
Engineering Services & City Engineer;
and, Chief Administrative Officer, Lake
Huron & Elgin Area Water Systems

Andrew J. Henry, P.Eng.
Director, Regional Water
Lake Huron & Elgin Area Water
Systems
### APPENDIX C: SUMMARY OF CLAIMS AND PAYMENTS

<table>
<thead>
<tr>
<th>Project</th>
<th>Expenditures</th>
<th>Claimed to Date</th>
<th>Received to Date</th>
<th>Owing to Recipient</th>
<th>Ontario Contribution</th>
<th>Owing to Recipient</th>
<th>Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM/3614</td>
<td>56,428,060.34</td>
<td>16,730,122.48</td>
<td>2,797,759.52</td>
<td>18,747,884.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
</tr>
<tr>
<td>LH1346</td>
<td>10,955,082.44</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
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<td>2,302,725.00</td>
</tr>
<tr>
<td>LH1388</td>
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<td>2,302,725.00</td>
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<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
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<tr>
<td>LH1305</td>
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<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
</tr>
<tr>
<td>LH1305</td>
<td>27,293,590.60</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
</tr>
<tr>
<td>LH1305</td>
<td>27,293,590.60</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
<td>2,302,725.00</td>
</tr>
<tr>
<td>EM/4082</td>
<td>3,399,072.31</td>
<td>1,180,667.00</td>
<td>1,180,667.00</td>
<td>1,180,667.00</td>
<td>1,180,667.00</td>
<td>1,180,667.00</td>
<td>1,180,667.00</td>
</tr>
<tr>
<td>EM/4024</td>
<td>2,287,598.35</td>
<td>3,399,072.31</td>
<td>1,180,667.00</td>
<td>1,180,667.00</td>
<td>1,180,667.00</td>
<td>1,180,667.00</td>
<td>1,180,667.00</td>
</tr>
<tr>
<td>EM/4024</td>
<td>167,357,773.51</td>
<td>4,768,030.70</td>
<td>4,768,030.70</td>
<td>4,768,030.70</td>
<td>4,768,030.70</td>
<td>4,768,030.70</td>
<td>4,768,030.70</td>
</tr>
</tbody>
</table>

Total Project Expenditures: 49,985,307.00
To: Chair and Members  
Elgin Area Primary Water Supply System Board of Management  

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

Subject: EA4156 High Lift Pump Replacements – Tender Award  

RECOMMENDATION  

That, on the recommendation of the Chief Administrative Officer, the following actions be taken with respect to the Elgin Area Primary Water Supply System High Lift Pump Replacements (EA4156) project:  

a) The Board of Management for the Elgin Area Primary Water Supply system AUTHORIZE the Chair and Chief Administrative Officer to execute an agreement with Dielco Industrial Contractors Ltd. (Dielco) for the construction of the High Lift Pump Replacements;  

b) The Board of Management for the Elgin Area Primary Water Supply system EXTEND the existing engineering assignment with AECOM for Contract Administration and Construction Supervision Services at an estimated cost of $224,870.00 (excluding HST); and,  

c) The Board of Management for the Elgin Area Primary Water Supply System RECEIVE this report for information.  

PREVIOUS AND RELATED REPORTS  

October 5, 2017  2018 Operating & Capital Budgets  
March 1, 2018 High Lift and Backwash Pump Replacements  
January 31, 2019 EA4156 High Lift Pump Replacement – Pump Fabrication  

BACKGROUND  

The recently completed Energy Audit and Pump Optimization study (Energy Study) identified a significant opportunity for energy savings and the optimization of pump operations with the replacement of the high lift pump system. This system is largely original to the plant construction (fifty years old) but was modified in 1996 when London and the Aylmer Secondary Water System joined the regional water supply.
Since the completion of the Energy Study, Board staff have continued discussions with Hydro One regarding financial incentives associated with the high lift pump replacements. Pursuant to these discussions, the EAPWSS submitted an incentive application in June 2018 to Hydro One under the Save-On Energy program for the replacement of four high lift pumps. The application includes an estimated project incentive of $480,000 with the requirement that the pumps be in-service by December 31, 2020.

Detailed engineering for the high lift pump replacement commenced in early 2018, the pump pre-selection process was finalized at the end of 2018 and construction is anticipated to be completed by the end of 2020.

**DISCUSSION**

AECOM finalized the detailed design in early 2019 and Tender #19-63 was advertised on March 29, 2019. Five (5) contractors submitted compliant bids on the closing date of April 29, 2019. The estimate of the works prior to tender close was $2,407,000.00 (excluding HST).

The acceptable bids received are summarized as follows:

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Tender Price (excluding HST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dielco Industrial Contractors Ltd.</td>
<td>$2,269,771.00</td>
</tr>
<tr>
<td>Stone Town Construction Limited</td>
<td>$2,320,895.00</td>
</tr>
<tr>
<td>Dean-Lane Contractors Inc.</td>
<td>$2,383,208.00</td>
</tr>
<tr>
<td>BGL Contractors Corp</td>
<td>$2,394,307.00</td>
</tr>
<tr>
<td>KENAI DAN Contracting Ltd.</td>
<td>$2,741,733.00</td>
</tr>
</tbody>
</table>

On this basis, the bid submitted by Dielco in the amount of $2,269,771.00 (excluding HST) was accepted.

In the process of finalizing the detailed design, Board staff requested that AECOM provide a work plan and fee schedule for contract administration and construction supervision services. The estimated cost to undertake the contract administration and construction supervision services associated with the project as submitted in their proposed work plan is $224,870 (excluding HST). Board staff have reviewed the proposal and recommend that the existing engineering assignment with AECOM be extended accordingly.
## PROJECT FINANCIAL STATUS

### Summary of Projected Costs
The following summary of estimated costs is provided for review and will be confirmed throughout the project:

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Design &amp; Tender Preparation</td>
<td>$ 237,338</td>
</tr>
<tr>
<td>Construction Administration &amp; Inspection</td>
<td>$ 224,870</td>
</tr>
<tr>
<td>Construction</td>
<td>$ 2,416,623</td>
</tr>
<tr>
<td><strong>Total Projected Costs</strong></td>
<td><strong>$ 2,878,831</strong></td>
</tr>
</tbody>
</table>

**Approved Budget**

$ 4,851,000

### Summary of Expenditures Incurred to Date as of April 30, 2019
The following summary of expenditures incurred to date:

<table>
<thead>
<tr>
<th>Description</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Design &amp; Tender Preparation</td>
<td>$ 147,179</td>
</tr>
<tr>
<td>Construction Administration &amp; Inspection</td>
<td>-</td>
</tr>
<tr>
<td>Construction</td>
<td>-</td>
</tr>
<tr>
<td>Additional Services</td>
<td>$ 328</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td><strong>$ 147,507</strong></td>
</tr>
</tbody>
</table>

**Forecast Budget Surplus/Deficit**

$ 1,972,169
CONCLUSION

The High Lift Pump Replacements project provides a significant opportunity for energy savings and qualifies for an estimated $480,000 in financial incentives through Hydro One’s Save-On Energy program.

On April 29, 2019, Dielco submitted a bid within the approved project budget that was compliant with the tender process, specifications and project requirements. Therefore, Board staff recommend that the Chair and Chief Administrative Officer be authorized to execute an agreement with Dielco for the construction of the High Lift Pump Replacements. Board staff also recommend that the Board extend the existing engineering assignment with AECOM to provide the contract administration and construction supervision services associated with the project.

Information for this report was provided by Billy Haklander, Environmental Services Engineer.

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

Recommended by:  
Kelly Scherr, P. Eng., MBA, FEC  
Chief Administrative Officer
To: Chair and Members
Elgin Area Primary Water Supply System Board of Management

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

Subject: Member Appointment By-Law

RECOMMENDATION

That the attached By-Law regarding the appointment of Members to the Board of Management for the Elgin Area Water Supply System BE INTRODUCED and approved by the Joint Board of Management for the Elgin Area Primary Water Supply System.

PREVIOUS AND RELATED REPORTS

March 22, 2007 Authority for preliminary negotiations with Dutton Dunwich regarding membership, and direct staff to review current interconnection agreement

March 28, 2008 Authority for detailed negotiations with Dutton Dunwich, Southwold and St. Thomas Secondary Water System regarding the development of a water supply agreement.

June 3, 2010 Status report on the development of a Water Supply Agreement for the supply of water to Dutton Dunwich

October 7, 2010 Authority to execute a Water Supply Agreement and approval of a Capacity Buy-in Charge for the supply of water to Dutton Dunwich

March 3, 2011 Approve the alteration of the Board Membership and voting structure upon Dutton Dunwich joining the Elgin Area Water System

March 6, 2014 Request by Dutton Dunwich to assume the Water Supply Agreement from Tri-County (referred back to staff)

October 2, 2014 Request by Dutton Dunwich to assume the Water Supply Agreement from Tri-County

June 7, 2018 Authority to execute a Water Supply Agreement with Dutton Dunwich, Southwold, & St. Thomas Secondary Water Supply System
BACKGROUND

The Elgin Area Primary Water Supply System had previously entered into a water supply agreement with the West Elgin Water System for a period of twenty years starting in 2003.

In 2010, the Board of Management for the Elgin Area Water Supply Agreement agreed to terminate the water supply agreement with the West Elgin water system in favour of entering into an agreement with the Municipality of Dutton-Dunwich. The discussions and negotiations with regard to the termination of the West Elgin agreement and drafting the Dutton-Dunwich agreement was concluded in 2018. The Board approved the execution of the four-party Water Supply Agreement with St. Thomas Secondary Water System, the Township of Southwold and the Municipality of Dutton-Dunwich on June 7, 2018.

At the June 7, 2018 meeting, the Board also directed staff to draft a by-law for the Board’s consideration which would incorporate the Municipality of Dutton-Dunwich in the Board Member appointments.

DISCUSSION

The appointment of members to the Board of Management are undertaken through the benefiting municipalities of the water system, and the makeup of the Board is roughly proportional to the volumes of water supplied to each municipality. For each Member appointed to the Board, a benefiting municipality is also entitled to appoint an Alternate Member to the Board. An Alternate Member may participate in meetings of the Board but may only vote in the absence of the Member.

In the case of the Town of Aylmer, the Township of Malahide, and the Municipality of Bayham, one Member is entitled to be appointed by the municipalities acting jointly. The municipalities may also appoint one Alternate Member to the Board, again acting jointly.

In the case of the Township of Southwold and the Municipality of Central Elgin, one Member is entitled to be appointed by the municipalities acting jointly. The municipalities may also appoint one Alternate Member to the Board, again acting jointly.

Members (and Alternate Members) of the Board serve at the pleasure of the benefiting municipality(s) that appointed them, and without specified term-limits or required credentials. In addition, while historically appointed Members have been elected officials of a municipality, there is no explicit requirement of this status or relationship to the benefiting municipality. While a benefiting municipality is free to appoint any elected official or member of the public, it is the opinion of staff that the benefiting municipalities be strongly discouraged from appointing municipal staff as it can create opportunities of conflicts of interest and difficult reporting relationships.
Accordingly, the current appointments to the Board of Management for the Elgin Area Water Supply System are as follows:

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Board Members</th>
<th>Percent Votes</th>
<th>2018 Volume (m³)</th>
<th>Percent 2018 Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Elgin + Southold</td>
<td>1</td>
<td>14.29%</td>
<td>434,706</td>
<td>6.44%</td>
</tr>
<tr>
<td>Central Elgin + Southold</td>
<td></td>
<td></td>
<td>558,731</td>
<td></td>
</tr>
<tr>
<td>Aylmer + Malahide + Bayham</td>
<td>1</td>
<td>14.29%</td>
<td>1,396,039</td>
<td>10.37%</td>
</tr>
<tr>
<td>Aylmer + Malahide + Bayham</td>
<td></td>
<td></td>
<td>118,606</td>
<td></td>
</tr>
<tr>
<td>St. Thomas</td>
<td>2</td>
<td>28.57%</td>
<td>4,560,493</td>
<td>29.58%</td>
</tr>
<tr>
<td>London</td>
<td>3</td>
<td>42.86%</td>
<td>8,262,355</td>
<td>53.60%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>7</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>14,886,012</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

The proposed By-Law, attached to this report, amends the appointment and members of the Board such that the joint appointment of one member would be expanded. Similar to the current arrangement between Aylmer, Malahide and Bayham, the proposed alteration of the Board Membership would add Dutton-Dunwich as a jointly appointed Member (and Alternate Member) along with Central Elgin, Southwold and Dutton-Dunwich.

Accordingly, the Member appointments to the Board in the proposed By-Law would be reflected as follows:

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Appointed Board Member(s)</th>
<th>Percent Membership</th>
<th>2018 Volume (m³)</th>
<th>Percent 2018 Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Elgin + Southold</td>
<td>1</td>
<td>14.29%</td>
<td>434,706</td>
<td>7.47%</td>
</tr>
<tr>
<td>Central Elgin + Southold</td>
<td></td>
<td></td>
<td>558,731</td>
<td></td>
</tr>
<tr>
<td>Dutton Dunwich</td>
<td></td>
<td></td>
<td>170,286</td>
<td></td>
</tr>
<tr>
<td>Aylmer + Malahide + Bayham</td>
<td>1</td>
<td>14.29%</td>
<td>1,396,039</td>
<td>10.26%</td>
</tr>
<tr>
<td>Aylmer + Malahide + Bayham</td>
<td></td>
<td></td>
<td>118,606</td>
<td></td>
</tr>
<tr>
<td>St. Thomas</td>
<td>2</td>
<td>28.57%</td>
<td>4,560,493</td>
<td>29.26%</td>
</tr>
<tr>
<td>London</td>
<td>3</td>
<td>42.86%</td>
<td>8,262,355</td>
<td>53.01%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>7</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>15,032,012</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

Conditional on the completion and execution of a Water Supply Agreement with Dutton-Dunwich, the alteration to the Board Membership was accepted by the Board at the March 3, 2011, and would require a By-Law to codify the alteration of the appointment process.
The proposed By-Law was previously circulated to the benefiting municipalities of the Elgin Area Water Supply System for information and comment.

**CONCLUSION**

Since inception, the appointed Members of the Board of Management for the Elgin Area Water Supply System have been appointed by the benefiting municipalities and the Members serve at the pleasure of the appointing municipalities.

Membership has been approximately proportional to the volume of water supplies to the benefiting municipalities. While the total volume supplied to each municipality may vary from year to year, the approximate proportionality to appointed Members remains reasonably consistent.

With the addition of the Municipality of Dutton-Dunwich, the approximate proportionality of Member appointments to the volume supplied is maintained if the Municipality of Central Elgin, the Township of Southwold, and the Municipality of Dutton-Dunwich **jointly** appoint a Member (and Alternate Member).

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

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

Attachment: Proposed By-Law – Appointment of Board Members and Alternate Members
BY-LAW No. ___

A by-law relating to the appointment of Members and Alternate Members to the Joint Board of Management for the Elgin Area Primary Water Supply System.

WHEREAS the Joint Board of Management for the Elgin Area Primary Water Supply System was established pursuant to a Transfer Order issued under the Municipal Water and Sewage transfer Act, 1997;

AND WHEREAS the Transfer Order provided that the composition of the Board of Management could be altered as determined by the Board of Management;

AND WHEREAS it is deemed expedient to alter the composition of the Board of Management as herein provided;

NOW THEREFORE the Joint Board of Management for the Elgin Area Primary Water Supply System enacts as follows:

DEFINITIONS

1.0 In this By-Law, unless the context otherwise requires:

“Board of Management” means the Joint Board of Management for the Elgin Area Primary Water Supply System;

“Board Member” means a person appointed by the Council(s) of a benefiting municipality of the Elgin Area Water Primary Supply in accordance with this By-Law;

“Alternate Board Member” means a person appointed by the Council(s) of a benefiting municipality of the Elgin Area Primary Water Supply system in accordance with this By-Law.

COMPOSITION OF THE BOARD OF MANAGEMENT

2.1 APPOINTMENT OF BOARD MEMBERS

The Board of Management shall be comprised of up to seven (7) Members:

(a) The Council of the Corporation of the City of London may appoint up to three (3) Board Members;
(b) The Council of the Corporation of the City of St. Thomas may appoint up to two (2) Board Members;

(c) Acting jointly, the Councils of the Corporation of the Municipality of Bayham, the Corporation of the Township of Malahide, and the Corporation of the Town of Aylmer together may appoint one (1) Board Member;

(d) Acting jointly, the Councils of the Corporation of the Municipality of Central Elgin, the Corporation of the Township of Southwold, and the Corporation of the Municipality of Dutton Dunwich may appoint one (1) Board Member.

2.2 APPOINTMENT OF ALTERNATE MEMBERS.
For each Board Member, the respective Council or Councils may appoint one (1) Alternate Board Member. An Alternate Board Member is entitled to attend and participate in all meetings of the Board but may only vote in the absence of the Board Member(s) appointed by the respective Council or Councils.

2.3 TERM.
Board Members and Alternate Board Members will serve at the pleasure of the appointing municipal Council(s).

2.4 REMUNERATION.
Board Members and/or Alternate Members will not receive any remuneration, other than for direct expenses incurred by the Member or Alternate Member in the performance of their duties as a Member or Alternate Member that is not otherwise reimbursed by their appointing Council(s) or benefiting municipality.

ENACTED in open session this ____ day of _______, 20__.
March 15, 2019

Andrew J. Henry, P.Eng.
Director, Regional Water Supply
Lake Huron & Elgin Area Water Supply Systems
235 North Centre Rd., Suite 200
London, Ontario  N5X 4E7

Dear Sir:

RE: EMPS Building Ownership

We wish to advise that the Aylmer Area Secondary Water Supply System Joint Board of Management passed the following Resolution on March 13, 2019:

THAT Report No. AASWSS-19-05 entitled “Elgin Middlesex Pumping Station: Ownership Negotiations Update” be received;

AND THAT the Elgin Area Primary Water Supply System be advised that the AASWSS Joint Board of Management’s preference is to pursue a four-party Joint Occupancy Agreement for the Elgin Middlesex Pump Station with the AASWSS, St. Thomas Secondary Water System, and the City of London as tenants of the Elgin Middlesex Pump Station building; it being noted that the Elgin Area Primary Water Supply System would retain ownership and responsibility for the pump station building envelope and related building services, and each of the Secondary water systems would retain ownership and responsibility for their respective pumps and associated equipment;

AND THAT the Municipal Staff be authorized to obtain legal opinions, where required, during the ownership negotiations.

Please contact either the undersigned or Director of Physical Services Rob Johnson, if you have any questions or require any additional information regarding any of the above.

Yours very truly,
TOWNSHIP OF MALAHIDE

M. CASAVECCHIA-SOMERS, D.P.A., C.M.O., CMM III
Chief Administrative Officer/Clerk
Copy - Aylmer Area Secondary Water Supply System Joint Board of Management
To: Chair and Members
   Elgin Area Primary Water Supply System Board of Management

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

Subject: Elgin-Middlesex Pump Station Ownership Reconciliation

RECOMMENDATION

That the Board of Management for the Elgin Area Primary Water Supply System provide
direction regarding the ownership of the common pump station building and related building
services at the Elgin Terminal Reservoir site.

PREVIOUS AND RELATED REPORTS

June 7, 2012   Elgin-Middlesex Pumping Station Ownership Reconciliation
March 5, 2015  Elgin-Middlesex Pumping Station Ownership Reconciliation
March 3, 2016  Elgin-Middlesex Pumping Station Ownership Reconciliation

BACKGROUND

The Board of Management for the Elgin Area Primary Water Supply System (EAPWSS) was
established in November 2000 under a Transfer Order issued by the Minister of the
Environment, pursuant to the Municipal Water and Sewage Transfer Act, 1997. A similar
Transfer Order also established Secondary Water Systems which operated transmission
systems from the EAPWSS to specific benefiting municipalities.

At the Elgin Terminal Reservoir Site, the EAPWSS owns and maintains the property, as well
as the two-cell reservoir, settling pond and valve house that controls the supply of water into
the reservoir site.

The Transfer Orders also established that each of the London, St. Thomas Secondary, and
Aylmer Secondary water systems owns and maintains the pumps and associated equipment
within the common pump station building on the EAPWSS property. The City of London also
has a pneumatic surge control system on the property, which they own and operate. There is
also a backup generator and rechlorination system within the common pump station building
which is jointly owned by the St. Thomas Secondary and Aylmer Secondary systems.

The Transfer Order was vague or otherwise unclear with regard to the ownership of the pump
station building itself and the associated building services. While discussions with the four
parties have confirmed specific asset ownership and responsibilities related to pump-related equipment, the ownership and responsibility of the building itself remains unresolved.

At the March 3, 2016 meeting, the Board established the principle position that the primary water system should not be directly involved in the operation of secondary transmission systems and municipal distribution systems. Accordingly, the Board provided direction that the common pump station building should be jointly-owned by the City of London, the St. Thomas Secondary Water System, and the Aylmer Secondary Water System similar to other jointly-owned assets on the property.

The Township of Malahide, Administering Municipality for the Aylmer Secondary Water Supply System, notified Board staff on March 15, 2019 that the Aylmer Secondary Board has requested that the EAPWSS reconsider its position and expressed a preference for the Elgin Area Water System to own the building (excluding the pumps and pump-related assets of the secondary water systems).

**DISCUSSION**

Discussions between the EAPWSS, St. Thomas Secondary, Aylmer Secondary, and City of London over the last decade related to the Elgin-Middlesex Pump Station (EMPS) have centered on the confirmation of asset ownership and coordination of operational and construction related activities.

With specific regard to the ownership of the pump station building, discussions and negotiations formulated two basic options:

1. **Pump Station Building as a jointly-owned asset**
   This option assumes that the common pump station building is jointly-owned by the City of London, the St. Thomas Secondary Water System and the Aylmer Secondary Water System. Decisions related to the operation, maintenance, and repair of the building and the building-related services would be undertaken and paid by the three systems.

   This option would require a Licence of Occupancy to be granted by the Elgin Area Primary Water System for the secondary water systems to (jointly) own and maintain a building on our property.

   As the common pump station building is not utilized nor is of the benefit of the primary water supply system, the EAPWSS would have no responsibilities associated with this building. This option is the basic premise of the adopted principle from the March 3, 2016 meeting of the Board and a Licence of Occupancy was drafted based on the ongoing negotiations with the municipalities.

   The draft Licence of Occupancy was accepted by the City of London and the St. Thomas Secondary Water System in principle, but was rejected by the Aylmer Secondary Water System who expressed a preference for the second option.
If the Board chooses to continue with this principle, despite the objection by the Aylmer Secondary Water System, the resolution of March 3, 2016 would mean that the building and building-related services would be held by the City of London (as trustee) and all maintenance/repair activities related to the building (including the roof, building façade, HVAC, etc.) would be managed by the city. It would be left to the City of London to negotiate and gain agreement on any cost allocations needed for the repairs.

2. **Pump Station Building as asset owned by the EAPWSS and leased to the Secondary Water Systems**

This option assumes that the common pump station building is owned by the EAPWSS, and each of the City of London, St. Thomas Secondary Water System, and the Aylmer Secondary Water System (collectively) occupy portions of the building under an occupancy licence. In effect, this arrangement is akin to a “landlord-tenant” type of arrangement.

In contrast to the previous option, rather than a Licence of Occupancy for the secondary systems to own and maintain a building on our property, the Licence of Occupancy would be for the secondary systems to jointly occupy a building which the Board would own.

While the Elgin Primary Water System has no operational activities associated with this building, this option would simplify the decision-making process for building maintenance and repairs to the benefit of the secondary water systems. The Elgin Area Primary Water System would be responsible for managing the building and related building assets (including roof, building façade, HVAC, septic system, etc.) and undertake all building-related repairs and replacements as needed.

Should the Board choose to pursue this option, effectively reversing the decision of March 3, 2016, it is the recommendation of staff that “rental rate” be established and charged to the occupying secondary water systems in order to pay for all building operational costs, including such things as natural gas and regular HVAC maintenance. The “rental rate” charged to the secondary water systems would exclude costs that are directly attributed to the operation of the pumps and related secondary water systems, such as electricity which is currently apportioned based on measured proportionate consumption.

In addition, it is the recommendation of staff that a separate Reserve Fund be established with annual contributions from the “rental rate” to fund any necessary asset repairs and replacements over the course of the assets’ lifecycle.
CONCLUSION

Negotiations with the City of London, the St. Thomas Secondary Water System, and the Aylmer Secondary Water System to finalize and clarify the ownership of assets at the Elgin-Middlesex Pump Station has reached an impasse and direction from the Board is required.

Although the principle adopted by the Board at the March 3, 2016 meeting provided direction to staff to pursue the option for the three secondary water systems to jointly own the pump station building and remove the primary water system from the operational activities of the secondary water systems, the Aylmer Secondary Water System has asked for the Board’s reconsideration and expressed a preference for the Board to own the building.

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

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

Attachment: Appendix A – Proposed Pumping Station & Reservoir Ownership
APPENDIX A: PROPOSED PUMPING STATION & RESERVOIR OWNERSHIP
To: Chair and Members  
Elgin Area Primary Water Supply System Board of Management  

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

Subject: 2018 Audited Financial Statement  

RECOMMENDATION  
That the Board of Management for the Eglin Area Primary Water Supply System RECEIVE AND ACCEPT the 2018 Audited Financial Statement for the Elgin Area Primary Water Supply System.  

DISCUSSION  
On an annual basis, the finances and financial statements for the Elgin Area Primary Water Supply System are audited by a financial auditor acquired in partnership with the City of London in its capacity as Administering Municipality for the water system. The draft audited financial statements have been provided to the benefiting municipalities, as well as the reconciled volumes supplied to each municipality, to allow the municipalities to complete their respective financial audits and statements.  

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

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

Attachment: 2018 Audited Financial Statement, Elgin Area Primary Water Supply System
Financial Statements of

ELGIN AREA PRIMARY WATER SUPPLY SYSTEM

December 31, 2018
INDEPENDENT AUDITORS’ REPORT

To the Board of Directors of Elgin Area Primary Water Supply System

Opinion

We have audited the financial statements of Elgin Area Primary Water Supply System (the “Entity”), which comprise:

- the statement of financial position as at December 31, 2018;
- the statement of operations for the year then ended;
- the statement of changes in net debt for the year then ended;
- the statement of cash flows for the year then ended;
- and notes to the financial statements, including a summary of significant accounting policies (Hereinafter referred to as the “financial statements”).

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Entity as at December 31, 2018, and its results of operations, its changes in net debt and its consolidated cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the “Auditors’ Responsibilities for the Audit of the Financial Statements” section of our auditors’ report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Entity’s ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity’s financial reporting process.
Auditors’ Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors’ report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

  The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity’s internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management’s use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors’ report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors’ report. However, future events or conditions may cause the Entity to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
ELGIN AREA PRIMARY WATER SUPPLY SYSTEM  
Statement of Financial Position  
December 31, 2018, with comparative information for 2017

<table>
<thead>
<tr>
<th>Financial assets</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due from the Corporation of the City of London (note 3)</td>
<td>$ 9,700,078</td>
<td>$ 9,429,037</td>
</tr>
<tr>
<td>Trade and other receivables</td>
<td>2,122,110</td>
<td>$ 1,043,074</td>
</tr>
<tr>
<td>Loan receivable (note 10)</td>
<td>229,190</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total financial assets</strong></td>
<td>12,051,378</td>
<td>10,472,111</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial liabilities</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable and accrued liabilities</td>
<td>2,163,740</td>
<td>1,745,577</td>
</tr>
<tr>
<td>Deferred revenue (note 4)</td>
<td>-</td>
<td>860,379</td>
</tr>
<tr>
<td>Accrued interest on long-term debt</td>
<td>102,436</td>
<td>134,922</td>
</tr>
<tr>
<td>Long-term debt (note 5)</td>
<td>14,269,676</td>
<td>17,265,612</td>
</tr>
<tr>
<td><strong>Total financial liabilities</strong></td>
<td>16,535,852</td>
<td>20,006,490</td>
</tr>
</tbody>
</table>

| Net debt | (4,484,474) | (9,534,379) |

<table>
<thead>
<tr>
<th>Non-financial assets</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangible capital assets (note 6)</td>
<td>68,147,998</td>
<td>69,506,456</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>86,181</td>
<td>92,629</td>
</tr>
<tr>
<td><strong>Total non-financial assets</strong></td>
<td>68,234,179</td>
<td>69,599,085</td>
</tr>
</tbody>
</table>

| Accumulated surplus (note 7) | $ 63,749,705 | $ 60,064,706 |

See accompanying notes to financial statements
## ELGIN AREA PRIMARY WATER SUPPLY SYSTEM

### Statement of Operations

Year ended December 31, 2018, with comparative information for 2017

<table>
<thead>
<tr>
<th></th>
<th>Budget</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User charges</td>
<td></td>
<td>$11,915,561</td>
<td>12,403,077</td>
</tr>
<tr>
<td>Investment income</td>
<td>6,000</td>
<td>182,352</td>
<td>122,513</td>
</tr>
<tr>
<td>Transfer payments:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provincial</td>
<td>-</td>
<td>860,379</td>
<td>654,312</td>
</tr>
<tr>
<td>Federal</td>
<td>-</td>
<td>1,060,358</td>
<td>649,048</td>
</tr>
<tr>
<td>Other (note 10)</td>
<td>4,000</td>
<td>129,815</td>
<td>154,814</td>
</tr>
<tr>
<td><strong>Total revenues</strong></td>
<td></td>
<td>11,925,561</td>
<td>14,635,981</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries, wages and benefits</td>
<td></td>
<td>791,303</td>
<td>667,733</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td></td>
<td>5,711,250</td>
<td>5,560,667</td>
</tr>
<tr>
<td>Contracted services</td>
<td>98,500</td>
<td>548,747</td>
<td>705,777</td>
</tr>
<tr>
<td>Rents and financial expenses</td>
<td></td>
<td>58,250</td>
<td>57,239</td>
</tr>
<tr>
<td>Interest on long-term debt (note 5)</td>
<td></td>
<td>423,056</td>
<td>436,484</td>
</tr>
<tr>
<td>Amortization of tangible capital assets (note 6)</td>
<td></td>
<td>-</td>
<td>3,471,860</td>
</tr>
<tr>
<td>Administrative charges to the Corporation of the City of London</td>
<td></td>
<td>208,252</td>
<td>208,252</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td></td>
<td>7,290,611</td>
<td>10,950,982</td>
</tr>
<tr>
<td><strong>Annual surplus</strong></td>
<td></td>
<td>4,634,950</td>
<td>3,684,999</td>
</tr>
<tr>
<td><strong>Accumulated surplus, beginning of year (note 7)</strong></td>
<td></td>
<td>60,064,706</td>
<td>60,064,706</td>
</tr>
<tr>
<td><strong>Accumulated surplus, end of year (note 7)</strong></td>
<td></td>
<td>$64,699,656</td>
<td>$63,749,705</td>
</tr>
</tbody>
</table>

See accompanying notes to financial statements
## Statement of Change in Net Debt

Year ended December 31, 2018, with comparative information for 2017

<table>
<thead>
<tr>
<th></th>
<th>Budget</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual surplus</td>
<td>$ 4,634,950</td>
<td>$ 3,684,999</td>
<td>$ 2,368,550</td>
</tr>
<tr>
<td>Acquisition of tangible capital assets</td>
<td>(2,115,000)</td>
<td>(2,113,402)</td>
<td>(1,915,730)</td>
</tr>
<tr>
<td>Amortization of tangible capital assets</td>
<td>-</td>
<td>3,471,860</td>
<td>3,534,210</td>
</tr>
<tr>
<td></td>
<td>2,519,950</td>
<td>5,043,457</td>
<td>3,987,030</td>
</tr>
<tr>
<td>Change in prepaid expenses</td>
<td>-</td>
<td>6,448</td>
<td>(25,521)</td>
</tr>
<tr>
<td>Change in net debt</td>
<td>2,519,950</td>
<td>5,049,905</td>
<td>3,961,509</td>
</tr>
<tr>
<td>Net debt, beginning of year</td>
<td>(9,534,379)</td>
<td>(9,534,379)</td>
<td>(13,495,888)</td>
</tr>
<tr>
<td>Net debt, end of year</td>
<td>$ (7,014,429)</td>
<td>$ (4,484,474)</td>
<td>$ (9,534,379)</td>
</tr>
</tbody>
</table>

See accompanying notes to financial statements
ELGIN AREA PRIMARY WATER SUPPLY SYSTEM
Statement of Cash Flows
Year ended December 31, 2018, with comparative information for 2017

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash provided by:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operating activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual surplus</td>
<td>$3,684,999</td>
<td>$2,368,550</td>
</tr>
<tr>
<td><strong>Items not involving cash:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amortization of tangible capital assets</td>
<td>3,471,860</td>
<td>3,534,210</td>
</tr>
<tr>
<td>Amortization of debenture discount</td>
<td>27,783</td>
<td>24,496</td>
</tr>
<tr>
<td><strong>Changes in non-cash assets and liabilities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due from the Corporation of the City of London</td>
<td>(271,041)</td>
<td>(4,699,440)</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>6,448</td>
<td>(25,521)</td>
</tr>
<tr>
<td>Trade and other receivables</td>
<td>(1,079,036)</td>
<td>1,634,850</td>
</tr>
<tr>
<td>Accounts payable and accrued liabilities</td>
<td>418,163</td>
<td>(2,265,054)</td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>(860,379)</td>
<td>(654,312)</td>
</tr>
<tr>
<td>Accrued interest on long-term debt</td>
<td>(32,486)</td>
<td>1,318</td>
</tr>
<tr>
<td><strong>Net change in cash from operating activities</strong></td>
<td>5,366,311</td>
<td>(80,903)</td>
</tr>
<tr>
<td><strong>Capital activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase of tangible capital assets</td>
<td>(2,113,402)</td>
<td>(1,915,730)</td>
</tr>
<tr>
<td><strong>Cash used in capital activities</strong></td>
<td>(2,113,402)</td>
<td>(1,915,730)</td>
</tr>
<tr>
<td><strong>Financing activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from issuance of long-term debt</td>
<td>-</td>
<td>4,527,312</td>
</tr>
<tr>
<td>Long-term debt repayments</td>
<td>(3,023,719)</td>
<td>(2,515,328)</td>
</tr>
<tr>
<td>Decrease in other liability</td>
<td>-</td>
<td>(15,351)</td>
</tr>
<tr>
<td>Loan receivable</td>
<td>(229,190)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Cash provided by financing activities</strong></td>
<td>(3,252,909)</td>
<td>1,996,633</td>
</tr>
<tr>
<td><strong>Net change in cash flows</strong></td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>
1. **Nature of reporting entity**

The Ontario Water Resources Commission (the “Commission”) of the Province of Ontario constructed, owned and operated a water treatment plant on Lake Erie and pipeline to the City of St. Thomas and the Ford Talbotville Assembly Plant on or about 1967. The Ministry of the Environment (the “Ministry”) was created in about 1973 and assumed all operations and activities of the Commission. In or about 1991, operational related activities (water and wastewater systems) of the Ministry were transferred to the Ontario Clean Water Agency, a Crown corporation of the Province of Ontario. In accordance with agreements with the associated municipalities, the Ministry extended pipelines to the present communities of Port Burwell, Port Stanley, and Southwold, and in 1996 to the City of London and the Town of Aylmer.

In accordance with the **Municipal Water and Sewage Systems Transfer Act, 1997**, the final Transfer Order for Elgin Area Primary Water Supply System (the “Entity”) was effective on November 29, 2000.

Under the transfer order, the works, properties and all assets, liabilities, rights and obligations of the system were transferred jointly to The Corporation of the City of London, The Corporation of the Town of Aylmer, The Corporation of the Municipality of Bayham, The Corporation of the Municipality of Central Elgin, The Corporation of the Township of Malahide, The Corporation of the Township of Southwold and The Corporation of the City of St. Thomas. The Corporation of the City of London (the “Corporation”) was named as the administering municipality. The Corporation of the Municipality of Dutton Dunwich joined the joint board of management in 2018. However, the appointment and voting structure is pending until the June 2019 board meeting.

The transfer order established a joint board of management to govern the management of the water supply system. The joint board of management is comprised of seven members appointed by the respective councils of participating municipalities. The Board composition is as follows:

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Members</th>
<th>Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Corporation of the City of London</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>The Corporation of the City of St. Thomas</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>The Corporations of the Township of Southwold and the Municipality of Central Elgin (acting jointly)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>The Corporations of the Municipality of Bayham, Township of Malahide and Town of Aylmer (acting jointly)</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

2. **Significant accounting policies**

The financial statements of the Entity are prepared by management in accordance with Canadian generally accepted accounting principles as defined in the CPA Canada Public Sector Handbook - Accounting. Significant accounting policies are as follows:

(a) **Accrual accounting**

Sources of financing and expenses are reported on the accrual basis of accounting.

(b) **Non-financial assets**

Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They have useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.
ELGIN AREA PRIMARY WATER SUPPLY SYSTEM
Notes to Financial Statements (continued)
Year ended December 31, 2018

2. Significant accounting policies (continued)

(b) Non-financial assets (continued)

i) Tangible capital assets

Tangible capital assets are recorded at cost which includes amounts that are directly attributable to acquisition, construction, development or betterment of the asset. The cost, less residual value, of the tangible capital assets, excluding land, are amortized on a straight line basis over their estimated useful lives as follows:

<table>
<thead>
<tr>
<th>Asset</th>
<th>Useful Life - Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings and building improvements</td>
<td>15 – 40</td>
</tr>
<tr>
<td>Vehicles</td>
<td>5 – 15</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>7 – 20</td>
</tr>
<tr>
<td>Water infrastructure</td>
<td>10 – 60</td>
</tr>
<tr>
<td>Computers</td>
<td>3</td>
</tr>
</tbody>
</table>

Annual amortization is charged in the year of acquisition and in the year of disposal using the half year rule. Assets under construction are not amortized until the asset is available for productive use.

ii) Interest capitalization

The interest costs associated with the acquisition or construction of a tangible capital asset are not capitalized.

c) Revenue recognition

The Entity recognizes revenue when water is drawn by each customer, collection of the relevant receivable is probable, persuasive evidence of an arrangement exists and the sales price is fixed or determinable.

d) Government transfers

Government transfer payments to the Corporation are recognized in the financial statements in the year in which the payment is authorized and the events giving rise to the transfer occur, performance criteria are met, and a reasonable estimate of the amount can be made. Funding that is stipulated to be used for specific purposes is only recognized as revenue in the fiscal year that the related expenses are incurred or services performance. If funding is received for which the related expenses have not yet been incurred or services performed, these amounts are recorded as a liability at year end.

e) Use of estimates

The preparation of financial statements in conformity with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the year. Significant items subject to such estimates and assumptions include the valuation allowances for receivables and useful lives assigned to tangible capital assets.

Actual results could differ from those estimates.
2. Significant accounting policies (continued)

(f) Budget figures

Budget figures have been provided for comparison purposes. Given differences between the budgeting model and generally accepted accounting principles established by the Public Sector Accounting Board (“PSAB”), certain budgeted amounts have been reclassified to reflect the presentation adopted under PSAB.

(g) Liability for contaminated sites

Under PS 3260, contaminated sites are defined as the result of contamination being introduced in air, soil, water or sediment of a chemical, organic, or radioactive material or live organism that exceeds an environmental standard. This Standard relates to sites that are not in productive use and sites in productive use where an unexpected event resulted in contamination.

(h) Related Party Disclosures

The Entity adopted Public Sector Accounting Board Standard PS 2200 Related Party Transactions effective for fiscal periods beginning on or after April 1, 2017. The standard defines related party and provides disclosure requirements. Disclosure is only required when the transactions or events between related parties occur at a value different from what would have been recorded if they were not related and the transactions could have a material financial impact on the financial statements. The standard also requires disclosure of related party transactions that have occurred where no amounts have been recognized. The Entity adopted this standard on a prospective basis and there were no adjustments as a result of the adoption of this standard.

(i) Inter-entity Transactions

The Entity adopted Public Sector Accounting Board standard PS 3420 Inter-entity Transactions effective for fiscal periods beginning on or after April 1, 2017. The standard specifies how to account for transactions between public sector entities within the government reporting entity.

Transactions undertaken on similar terms and conditions to those adopted if the entities were dealing at arm’s length are recorded at the exchange amount. Transfers of an asset or liability at nominal or no consideration is recorded by the provider at the carrying amount and the recipient has the choice of using either the carrying amount or fair value. Cost allocations are reported using the exchange amount and revenues and expenses are reported on a gross basis. Unallocated costs for the provision of goods or services may be recorded by the recipient at the carrying amount or fair value unless otherwise dictated by policy, accountability structure or budget practice.

All other transactions are measured at the carrying amount.

The Entity adopted this standard on a prospective basis and there were no adjustments as a result of the adoption of this standard.
3. Due from the Corporation of the City of London

As the Administering Municipality, the Corporation manages the daily operations of the Entity. The Corporation maintains a separate general ledger on behalf of the Entity. All funds are paid and received through the Corporation’s bank account and held for use by the Entity or payable to the Corporation for expenses paid on behalf of the Entity.

4. Deferred revenue

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provincial HELP Funding</td>
<td>$ -</td>
<td>$ 860,379</td>
</tr>
</tbody>
</table>

5. Long-term debt

(a) Long-term debt is stated as follows:

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term debt assumed by The Corporation of the City of London, as administering municipality, on behalf of the Elgin Area Primary Water Supply System, with semi-annual interest payments:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) at rates of 5.875%, maturing August 2018.</td>
<td>$ -</td>
<td>$ 891,000</td>
</tr>
<tr>
<td>(b) at rates ranging from 2.30% to 3.20%, maturing September 2022.</td>
<td>4,513,350</td>
<td>5,573,700</td>
</tr>
<tr>
<td>(c) at rates ranging from 1.20% to 2.70%, maturing March 2026.</td>
<td>5,711,481</td>
<td>6,362,222</td>
</tr>
<tr>
<td>(d) at rates ranging from 1.15% to 2.85%, maturing March 2027.</td>
<td>4,135,914</td>
<td>4,557,542</td>
</tr>
<tr>
<td>Total long-term debt</td>
<td>$ 14,360,745</td>
<td>$ 17,384,464</td>
</tr>
<tr>
<td>Less: Unamortized debenture discount</td>
<td>(91,069)</td>
<td>(118,852)</td>
</tr>
<tr>
<td>Net long-term debt</td>
<td>$ 14,269,676</td>
<td>$ 17,265,612</td>
</tr>
</tbody>
</table>

(b) The long-term debt repayment schedule is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>2,177,530</td>
</tr>
<tr>
<td>2020</td>
<td>2,223,979</td>
</tr>
<tr>
<td>2021</td>
<td>2,272,512</td>
</tr>
<tr>
<td>2022</td>
<td>2,323,163</td>
</tr>
<tr>
<td>2023</td>
<td>1,176,125</td>
</tr>
<tr>
<td>2024 and beyond</td>
<td>4,187,436</td>
</tr>
</tbody>
</table>

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5. **Long-term debt (continued)**

(c) Total interest charges for the year for long-term debt which are reported on the Statement of Operations are as follows:

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>$408,701</td>
<td>$465,446</td>
</tr>
<tr>
<td>Amortization of debenture discount</td>
<td>27,783</td>
<td>24,496</td>
</tr>
<tr>
<td></td>
<td>$436,484</td>
<td>$489,942</td>
</tr>
</tbody>
</table>

6. **Tangible capital assets**

<table>
<thead>
<tr>
<th></th>
<th>Balance at December 31, 2017</th>
<th>Additions</th>
<th>Disposals</th>
<th>Balance at December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$1,251,559</td>
<td>-</td>
<td>-</td>
<td>$1,251,559</td>
</tr>
<tr>
<td>Buildings and building improvements</td>
<td>29,113,368</td>
<td>268,050</td>
<td>34,967</td>
<td>29,346,451</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>36,117,333</td>
<td>1,593,094</td>
<td>1,637,528</td>
<td>36,072,899</td>
</tr>
<tr>
<td>Vehicles</td>
<td>32,425</td>
<td>-</td>
<td>-</td>
<td>32,425</td>
</tr>
<tr>
<td>Water infrastructure</td>
<td>24,260,316</td>
<td>-</td>
<td>-</td>
<td>24,260,316</td>
</tr>
<tr>
<td>Computers</td>
<td>-</td>
<td>89,732</td>
<td>-</td>
<td>89,732</td>
</tr>
<tr>
<td>Assets under construction</td>
<td>194,945</td>
<td>302,051</td>
<td>139,525</td>
<td>357,471</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$90,969,946</strong></td>
<td><strong>2,252,927</strong></td>
<td><strong>1,812,020</strong></td>
<td><strong>$91,410,853</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Accumulated Amortization Balance at December 31, 2017</th>
<th>Amortization expense</th>
<th>Disposals</th>
<th>Balance at December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Buildings and building improvements</td>
<td>5,991,664</td>
<td>860,174</td>
<td>34,967</td>
<td>6,816,871</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>12,528,643</td>
<td>2,163,723</td>
<td>1,637,528</td>
<td>13,054,838</td>
</tr>
<tr>
<td>Vehicles</td>
<td>21,723</td>
<td>1,646</td>
<td>-</td>
<td>23,369</td>
</tr>
<tr>
<td>Water infrastructure</td>
<td>2,921,460</td>
<td>431,321</td>
<td>-</td>
<td>3,352,781</td>
</tr>
<tr>
<td>Computers</td>
<td>-</td>
<td>14,996</td>
<td>-</td>
<td>14,996</td>
</tr>
<tr>
<td>Assets under construction</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$21,463,490</strong></td>
<td><strong>3,471,860</strong></td>
<td><strong>1,672,495</strong></td>
<td><strong>$23,262,855</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Net book value</th>
<th>Net book value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2017</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Land</td>
<td>$1,251,559</td>
<td>$1,251,559</td>
</tr>
<tr>
<td>Buildings and building improvements</td>
<td>23,121,704</td>
<td>23,121,704</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>23,588,690</td>
<td>23,588,690</td>
</tr>
<tr>
<td>Vehicles</td>
<td>10,702</td>
<td>10,702</td>
</tr>
<tr>
<td>Water infrastructure</td>
<td>21,338,856</td>
<td>21,338,856</td>
</tr>
<tr>
<td>Computers</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Assets under construction</td>
<td>194,945</td>
<td>194,945</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$69,506,456</strong></td>
<td><strong>$69,506,456</strong></td>
</tr>
</tbody>
</table>

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6. Tangible capital assets (continued)

(a) Assets under construction

Assets under construction with a net book value of $357,471 (2017 - $194,945) have not been amortized. Amortization of these assets will commence when the asset is available for productive use.

(b) Tangible capital assets disclosed at nominal values

Where an estimate of fair value could not be made, the tangible capital asset was recognized at a nominal value. Land is the only category where nominal values were assigned.

(c) Write-down of tangible capital assets

There were no write-downs in tangible capital assets during the year.

7. Accumulated surplus

Accumulated surplus consists of individual fund surplus and reserve funds as follows:

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surplus:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invested in tangible capital assets</td>
<td>$53,353,315</td>
<td>$50,212,366</td>
</tr>
<tr>
<td>Total surplus</td>
<td>53,353,315</td>
<td>50,212,366</td>
</tr>
<tr>
<td>Reserve funds set aside for specific purpose by the Board:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure renewal - water operations</td>
<td>10,396,390</td>
<td>9,852,340</td>
</tr>
<tr>
<td>Total reserve funds</td>
<td>10,396,390</td>
<td>9,852,340</td>
</tr>
<tr>
<td></td>
<td>$63,749,705</td>
<td>$60,064,706</td>
</tr>
</tbody>
</table>

8. Financial instruments

(a) The carrying values of due from the Corporation of the City of London, trade accounts receivable and accounts payable and accrued liabilities approximate their fair values due to the relatively short periods to maturity of the instruments.

The fair value of long-term debt approximates its carrying value as interest rates are similar to current market rates of interest available to the Entity.

(b) Financial risks:

The Entity is not exposed to any significant interest, foreign currency or credit risks arising from its financial instruments.
9. Budget data

Budget data presented in these financial statements are based upon the 2018 operating budget approved by the joint board of management. Adjustments to budgeted values were required to provide comparative budget values based on the full accrual basis of accounting. The chart below reconciles the approved budget with the budget figures as presented in these financial statements.

<table>
<thead>
<tr>
<th>Revenues:</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Charges</td>
<td>$11,915,561</td>
</tr>
<tr>
<td>Municipal Revenue - Other</td>
<td>10,000</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>11,925,561</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Costs</td>
<td>748,803</td>
</tr>
<tr>
<td>Administrative Expenses</td>
<td>60,100</td>
</tr>
<tr>
<td>Financial Expenses – Other</td>
<td>160,000</td>
</tr>
<tr>
<td>Financial Expenses – Interest and Discount on Long-term Debt</td>
<td>423,056</td>
</tr>
<tr>
<td>Financial Expenses – Debt Principal Repayments</td>
<td>3,023,719</td>
</tr>
<tr>
<td>Financial Expenses – Transfers to Reserves and Reserve Funds</td>
<td>1,611,231</td>
</tr>
<tr>
<td>Purchased Services</td>
<td>317,250</td>
</tr>
<tr>
<td>Materials and Supplies</td>
<td>5,337,900</td>
</tr>
<tr>
<td>Furniture and Equipment</td>
<td>35,250</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>208,252</td>
</tr>
<tr>
<td>Recovered Expenses</td>
<td>-</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>11,925,561</td>
</tr>
</tbody>
</table>

Annual Surplus (Deficit) as per Budget $ -

PSAB Reporting Requirements:
- Transfers to Reserves and Reserve Funds $1,611,231
- Debt Principal Repayments 3,023,719

Net PSAB Budget Surplus as per Financial Statements $4,634,950

10. Loan Receivable

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy-in Charge Loan – Municipality of Dutton Dunwich</td>
<td>$229,190</td>
<td>$ -</td>
</tr>
<tr>
<td>Interest Earned on Loan at prime rate less 1.53%</td>
<td>$5,190</td>
<td>$ -</td>
</tr>
</tbody>
</table>

Effective January 1, 2018, the Municipality of Dutton Dunwich entered into a four-party water supply agreement with the Township of Southwold, the St. Thomas Secondary Water Supply System, and the Elgin Area Water Supply System resulting in a buy-in charge of $252,000. Dutton Dunwich has requested and the Elgin Board has consented to payment of this buy-in charge over a 10 year term bearing interest on the outstanding amount. During the year, $22,810 was received as payment on the loan. This loan is paid quarterly and will mature in December 2027.