

## THE CORPORATION OF THE TOWNSHIP OF PUSLINCH 2016 COUNCIL MEETING

### **A G E N D A**

**DATE:** Wednesday, June, 1, 2016

**CLOSED MEETING:** 12:30 P.M.

**REGULAR MEETING:** 1:00 P.M.

**# Denotes resolution prepared**

1. Call the Meeting to Order
2. Disclosure of Pecuniary Interest & the General Nature Thereof.
3. Adoption and Receipt of Minutes of the Previous Meeting.#

(a) Council Meeting – May 18, 2016

(b) Closed Council Meeting – May 18, 2016

4. Business Arising Out of the Minutes.

#### 5. **PUBLIC MEETINGS**

1. **Public Information Meeting – Rezoning Application D14/HAY – Gerry Hayden, Concession 3, Part Lots 24 & 25, municipally known as 7128 Smith Road,.**

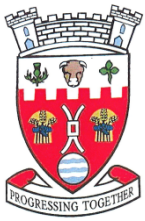
**\*note this Public Information Meeting will be held on Thursday, June 23, 2016 at 7:00 p.m. at the Municipal Complex – 7404 Wellington Rd. 34**

(a) Notice of Public Meeting

2. **Public Information Meeting - Rezoning Application File D14/ONT – 2435953 Ontario Inc (ASR Transportation), Concession 7, Rear Part Lot 25, municipally known as 7456 McLean Road W.**

**\*note this Public Information Meeting will be held on Thursday, June 23, 2016 at 7:00 p.m. at the Municipal Complex – 7404 Wellington Rd. 34**

(a) Notice of Complete Application & Public Meeting



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3. **Public Information Meeting - Rezoning Application File D14/J2K – J2K Capital Inc., Concession 7, Rear Part Lot 26, RP 61R863, Brock Road S.**

**\*note this Public Information Meeting will be held on Thursday, June 23, 2016 at 7:00 p.m. at the Municipal Complex – 7404 Wellington Rd. 34**

(a) Notice of Revised Application & Public Meeting

6. **COMMUNICATIONS**

1. **City of Guelph – Tier 3 Water Quantity Risk Assessment Peer Review**

(a) Peer Review Package#

2. **University of Guelph /Dufferin Aggregates  
Mill Creek Pit, Licence 5738  
7115 Concession 2**

(a) Correspondence from Dufferin Aggregates regarding Monthly Monitoring Report, Mill Creek Pit, License #5738, (May 2016), Township of Puslinch, Wellington County dated May 12, 2016.

**Mr. Stan Denhoed, Harden Environmental Services Ltd. has advised that he has reviewed the monthly report and he is satisfied that there are no exceedences.**

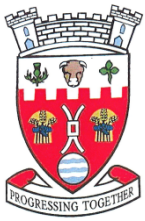
3. **Environmental Registry**

(a) Victoria Park Villages Inc. – 1159 Victoria Rd. South, Lot 5, Concession 8 – Puslinch – Permit to Take Water- OWRA s. 34.

(b) Royal Canin Canada Company – 100 Beiber Road – Lot 28, Concession 8 – Permit to Take Water – OWRA s. 34.

4. **Intergovernmental Affairs#**

(a) Various correspondence for review.



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7. **DELEGATIONS / PRESENTATIONS #**

1:05 p.m. –Kyle Davis, Risk Management Official regarding City of Guelph – Tier  
3. \*See Agenda Items 6.1

8. **REPORTS**

1. **Puslinch Fire and Rescue Services**

None.

2. **Finance Department**

None.

3. **Administration Department**

(a) Report ADM-2016-009 –John Hamilton - Request for Temporary Use of  
Lands - Storm Water Management Lands - Block 6, Plan 847.#

4. **Planning and Building**

None.

5. **Roads & Parks Department**

None.

6. **Recreation Department**

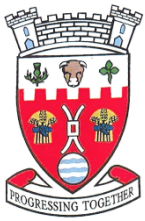
None.

7. **Mayor's Updates**

None.

9. **NOTICES OF MOTION**

None.



THE CORPORATION OF THE TOWNSHIP OF PUSLINCH  
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10. **COMMITTEE MINUTES**

None.

11. **MUNICIPAL ANNOUNCEMENTS**

12. **UNFINISHED BUSINESS**

13. **CLOSED ITEMS** ≠

(a) Confidential Verbal Report from Karen Landry, CAO/Clerk, regarding personal matters about an identifiable individual, including municipal or local board employees - Employee Matters

14. **BY-LAWS** ≠

(a) A by-law to authorize the entering into of a Site Plan Agreement with G S Bunny Investments Inc. – **Resolution No. 2016-217**

(b) A by-law to authorize the entering into of a Subdivision Agreement with 1719303 Ontario Inc. – **Resolution No. 2016-218**

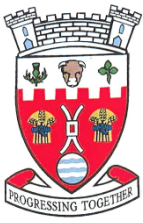


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15. **CONFIRMING BY-LAW #**

(a) By-law to confirm the proceedings of Council for the Corporation of the Township of Puslinch.

16. **ADJOURNMENT #**



## **MINUTES**

**DATE:** Wednesday, May 18, 2016

**TIME:** 6:45 p.m.

The May 18, 2016 Regular Council Meeting was held on the above date and called to order at 6:45 p.m. in the Council Chambers, Aberfoyle.

### **1. ATTENDANCE:**

Mayor Dennis Lever  
Councillor Matthew Bulmer  
Councillor Susan Fielding  
Councillor Ken Roth  
Councillor Wayne Stokley

### **STAFF IN ATTENDANCE:**

1. Karen Landry, CAO/Clerk
2. Donna Tremblay, Deputy Clerk
3. Paul Creamer, Director of Finance/Treasurer
4. Don Creed, Director of Public Works and Parks
5. Steve Goode, Fire Chief

### **OTHERS IN ATTENDANCE**

1. Kathy White
2. Tom and Tracey Cale
3. G. Leachmann
4. Don McKay
5. Colin Peace
6. K. Lever
7. Doug Smith

### **2. DISCLOSURE OF PECUNIARY INTEREST & THE GENERAL NATURE THEREOF:**

None.

### **3. ADOPTION OF THE MINUTES:**

- (a) Council Meeting – May 4, 2016
- (b) Closed Council Meeting – May 4, 2016
- (c) Public Meeting – Zoning Housekeeping Amendment – April 21, 2016

**Resolution No. 2016-206:** Moved by Councillor Stokley and  
Seconded by Councillor Fielding

That the minutes of the following meetings be adopted as written and distributed:

- (a) Council Meeting – May 4, 2016
- (b) Closed Council Meeting – May 4, 2016

That the minutes of the following meetings be received:

- (a) Public Meeting – Zoning Housekeeping Amendment – April 21, 2016

**CARRIED**



4. **BUSINESS ARISING OUT OF THE MINUTES:**

**Agenda Item 6.1 - Nestle Waters**

Mayor Lever advised that he spoke with Mr. Denhoed regarding private wells that are open across multiple bedrock units and Mr. Denhoed has advise him that he does have this information as well as information on geothermal systems.

Mayor Lever advised that he made inquiries of Nestle Waters as to whether chemical analysis testing is performed. Nestle's advised that they do conduct this type of testing, and will provide the results to the Township.

5. **PUBLIC MEETINGS:**

1. **Rezoning Application file D14/FRA – Ned & Lily Krayishnik, Concession 1 Part Lots 6 & 7, municipally known as 6637 and 6643 Concession 2.**

**\*note this Public Information meeting will be held on Thursday, May 19, 2016 at 7:00 p.m. at the Municipal Complex – 7404 Wellington Rd. 34**

- (a) Notice of Complete Application & Notice of the Public Meeting
- (b) Report PD-2016-014 - Report PD-2016-014 – Information Report - Public Meeting – Rezoning Application File D14/KRA, Ned & Lily Krayishnik, Concession 1, Part Lots 6 & 7, municipally known as 6637 and 6643 Concession 2.

6. **COMMUNICATIONS:**

1. **CBM/St. Mary's Cement  
Roszell Pit – Licence No. 625189  
6618 and 6524 Roszell Rd.**

- (a) Groundwater Science Corp. Roszell Road Pit, Licence No. 625189 – 2015 Groundwater Monitoring Report dated March 2016.≠
- (b) Correspondence from Groundwater Science Corp. regarding Climate Analysis dated March 28, 2016.≠
- (c) Correspondence from Harden Environmental regarding 2015 Groundwater Monitoring Report, CBM, Roszell Road Pit dated May 2, 2016. ≠ .

Councillor Stokley inquired as to whether Mr. Harden's concerns regarding changes in surface water temperatures had been made available to the Ministry of Natural Resources.

Karen Landry, CAO/Clerk advised Council that a copy of Mr. Harden's report had been provided to the Ministry of Natural Resources, the head operator of the pit and the consultant who prepared the water monitoring report.

**Resolution No. 2016-207:**

Moved by Councillor Fielding and  
Seconded by Councillor Stokley

That Council receive the following:

- (a) Groundwater Science Corp. Roszell Road Pit, Licence No. 625189 – 2015 Groundwater Monitoring Report dated March 2016.
- (b) Correspondence from Groundwater Science Corp. regarding Climate Analysis dated March 28, 2016.



- (c) Correspondence from Harden Environmental regarding 2015 Groundwater Monitoring Report, CBM, Roszell Road Pit dated May 2, 2016.

**CARRIED**

## 2. Intergovernmental Affairs

**Resolution No. 2016-208:** Moved by Councillor Stokley and  
Seconded by Councillor Fielding

That the correspondence items listed on the Council Agenda for May 18, 2016 Council meeting be received.

**CARRIED**

## 7. DELEGATIONS/PRESENTATIONS

1. Mr. Ron Faulkner, Chair and Mr. Walter Traschsel, Vice Chair, of the 2016 International Plowing Match regarding an update on the 2016 International Plowing Match.

Mr. Faulkner and Mr. Traschsel provided Council with information with respect to the 2016 International Plowing Match. Mr. Faulkner advised Council that the Town of Minto had purchased a dedication bench at the cost of \$500 and issued a challenge to Puslinch Council to also purchase a bench for the municipality. Mr. Faulker also made a request to Puslinch Council for staff resources and equipment should a need be required.

**Resolution No. 2016-209:** Moved by Councillor Fielding and  
Seconded by Councillor Stokley

That Council receive the presentation from Mr. Ron Faulkner, Chair and Mr. Walter Traschsel, Vice Chair of the 2016 International Plowing Match regarding an update on the 2016 International Plowing Match.

**CARRIED**

1. Mr. John Whitesell, Township of Puslinch Community Based Strategic Plan 2015-2020.

Mr. Whitesell made a presentation to Council with respect to the Township of Puslinch Community Based Strategic Plan 2015-2020.

**Resolution No. 2016-210:** Moved by Councillor Stokley and  
Seconded by Councillor Fielding

That Council receive the presentation from John Whitesell regarding the Township of Puslinch Community Based Strategic Plan 2015-2020; and

That Council adopts the Township of Puslinch Community Based Strategic Plan 2015-2020.

**CARRIED**

## 8. REPORTS:

### 1. Puslinch Fire and Rescue Services

None.





## 2. Finance Department

### (a) Report FIN-2016-011 – 2016 Final Tax Levy and Rates.≠

#### **Resolution No. 2016-211**

Moved by Councillor Stokley and  
Seconded by Councillor Fielding

That Report FIN-2016-011 regarding the 2016 Final Tax Levy and Rates be received;  
and

That the final property tax rates as identified in Schedule A and Schedule B to Report  
FIN-2016-011 be approved; and

That the final property tax due dates be established as of Wednesday August 31, 2016  
and Monday October 31, 2016; and

That a by-law be enacted for the levy and collection of property taxes for the 2016  
taxation year as outlined in Schedule D to Report FIN-2016-011.

**CARRIED**

### (b) Report FIN-2016-014 - Treasurer's Investment Report for 2015≠

Paul Creamer, Director of Finance/Treasurer advised that the Report contained an error  
in the chart on page 1 and that the correct 2015 total amount is \$81,147. Mr. Creamer  
advised that a revised copy of the Report FIN-2016-014 would be posted to the  
Township's website.

#### **Resolution No. 2016-212:**

Moved by Councillor Fielding and  
Seconded by Councillor Stokley

That Report FIN-2016-014 regarding the Treasurer's Investment Report for 2015 be  
received.

**CARRIED**

### (c) Report FIN-2016-015 – 2015 Lease Financing Agreement Summary Report≠

#### **Resolution No. 2016-213:**

Moved by Councillor Stokley and  
Seconded by Councillor Fielding

That Report FIN-2016-015 regarding 2015 Lease Financing Agreement Summary  
Report be received.

**CARRIED**

## 3. Administration Department

### (a) Whitesell & Company – Township of Puslinch Community Based Strategic Plan 2015-2020 ≠

**See Agenda Item 7.2**



#### 4. Planning and Building Department

(a) Chief Building Official Report – April, 2016. ≠

**Resolution No. 2016-214**

Moved by Councillor Fielding and  
Seconded by Councillor Stokley

That Council receive the Chief Building Official Report for April, 2016.

**CARRIED.**

(b) Report PD-2016-012 – Public Meeting – Rezoning Application File D14/ONT – 2435953 Ontario Inc. (ASR Transportation), Concession 7, Rear Part Lot 25, municipally known as 7456 McLean Road W.≠

**Resolution No. 2016-215:**

Moved by Councillor Stokley and  
Seconded by Councillor Fielding

That Report PD-2016-012 regarding Notice of Public Meeting – Rezoning Application file D14/ONT – 2435953 Ontario Inc. (ASR Transportation), Concession 7, Rear Part Lot 25, municipally known as 7456 McLean Road W, be received; and

That Council authorize the holding of a Statutory Public Meeting on Thursday June 23<sup>rd</sup>, at 7:00 pm in the Council Chambers, Municipal Complex.

**CARRIED**

(c) Report PD-2016-013 Public Meeting – Rezoning Application File D14/HAY – Gerry Hayden, Concession 3, Part Lots 24 & 25, municipally known as 7128 Smith Road.≠

**Resolution No. 2016-216:**

Moved by Councillor Fielding and  
Seconded by Councillor Stokley

That Report PD-2016-013 regarding Notice of Public Meeting – Rezoning Application File D14/HAY – Gerry Hayden, Concession 3, Part Lots 24 & 25, municipally known as 7128 Smith Road, be received; and

That Council authorize the holding of a Statutory Public Meeting on Thursday June 23<sup>rd</sup>, at 7:00 pm in the Council Chambers, Municipal Complex.

**CARRIED**

(d) Report PD-2016-015 – Site Plan Agreement G.S. Bunny Investments Inc. property described as Part Lot 27, Concession 7, Part 3, RP 61R20589 municipally known as 315 Brock Road, Township of Puslinch.

Councillor Bulmer inquired as to whether a clause similar to Clause 13.5 – No permit if money owed to Township could be included in future Site Plan Agreements to state that no permit will be issued if a Developer has outstanding permits or zoning violations on lands elsewhere in the Township.

Karen Landry, CAO/Clerk advised that a clause could be included in future Site Plan Agreements.



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**Resolution No. 2016-217:**

Moved by Councillor Stokley and  
Seconded by Councillor Fielding

That Report PD-2016-015 regarding the G S Bunny Investments Inc., property described as Part Lot 27, Concession 7, Part 3, RP 61R20589 municipally known as 315 Brock Road, Township of Puslinch, be received; and

That Council pass a by-law to authorize the entering into and the execution of a Site Plan Agreement with G S Bunny Investments Inc.

**CARRIED**

(e) Report PD-2016-016 - Subdivision Development Agreement – 1719303 Ontario Inc. (Morrison Estates) - property described as all of Lot 67, Part of Lot 66, 68, 69 & 77, All of Lots 72, 73, 74, 75 & 76 (Inclusive), Parts of Lots 103 to 107 (Inclusive), All of Lots 110 to 111 (Inclusive), Parts of Lots 112 and 131, All of Lots 132 to 135, and Part of Mary Street, James Street, Hill Street and North Street, Concession 8, Township of Puslinch, County of Wellington.≠

**Resolution No. 2016-218:**

Moved by Councillor Fielding and  
Seconded by Councillor Stokley

That Report PD-2016-016 regarding the Subdivision Development Agreement – 1719303 Ontario Inc. (Morrison Estates) , All of Lot 67, Part of Lot 66, 68, 69 & 77, All of Lots 72, 73, 74, 75 & 76 (Inclusive), Parts of Lots 103 to 107 (Inclusive), All of Lots 110 to 111 (Inclusive), Parts of Lots 112 and 131, All of Lots 132 to 135, and Part of Mary Street, James Street, Hill Street and North Street, Concession 8, Township of Puslinch, County of Wellington, municipally known as 0 Badenoch Street E, Township of Puslinch, be received; and

That Council pass a by-law to authorize the entering into and the execution of a Subdivision Development Agreement with 1719303 Ontario Inc.

**CARRIED**

(f) Report PD-2016-017 – Public Meeting – Rezoning Application File D14/J2K Capital Inc., Concession 7, Rear Part Lot 26, RP 61R863, Brock Road South. ≠

**Resolution No. 2016-219:**

Moved by Councillor Roth and  
Seconded by Councillor Bulmer

That Report PD-2016-017 regarding Notice of Public Meeting – Rezoning Application file D14/J2K – J2K Capital Inc., Concession 7, Rear Part Lot 26, RP 61R863, Brock Road S., be received; and

That Council authorize the holding of a Statutory Public Meeting on Thursday June 23<sup>rd</sup>, at 7:00 pm in the Council Chambers, Municipal Complex.

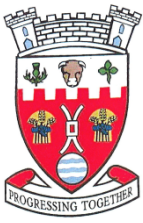
**CARRIED**

**5. Roads & Parks Department**

None.

**6. Recreation Department**

None.



**7. Mayor's Updates**

None.

**9. NOTICE OF MOTION:**

None.

**10. COMMITTEE MINUTES**

- (a) Heritage Committee– February 1, 2016
- (b) Planning and Development Advisory Committee – April 12, 2016
- (c) Committee of Adjustments – April 12, 2016

**Resolution No. 2016-220:** Moved by Councillor Bulmer and  
Seconded by Councillor Roth

That Council hereby receives the following minutes as information:

- (a) Heritage Committee– February 1, 2016
- (b) Planning and Development Advisory Committee – April 12, 2016
- (c) Committee of Adjustments – April 12, 2016

**CARRIED**

**11. MUNICIPAL ANNOUNCEMENTS**

**Accessibility Advisory Committee (ACC)**

Councillor Bulmer advised that he attended the County of Wellington Accessibility Advisory Committee meeting on Thursday, May 5, 2016. Councillor Bulmer provided Council with an update on the StopGap program. Councillor Bulmer advised that a number of local businesses are interested in the StopGap program and that the ACC has endorsed the program being included for CIP funding. Councillor Bulmer advised himself and County Warden Bridge, will be making a presentation to the County Economic Development group and will be suggesting that a presentation also be made to County Council in June.

**Hamilton Conservation Authority - Webster Falls Conservation Area**

Councillor Fielding advised that she attended the Hamilton Conservation Authority Board meeting on May 5, 2016. The Board has approved an increase in the parking and park access fees to the Spencer Gorge/Webster Falls Conservation Area effective May 21, 2016. Councillor Fielding also advised that Hamilton Conservation membership passes will not be valid for this park during weekends from May 21st to October 31<sup>st</sup>. If individuals believe the cost is prohibitive that individuals may wish to visit the Conservation Authorities passive areas like Fletcher Creek Ecological Preserve as there is no admission fee for those areas.

**Puslinch Lake Conservation Association**

Councillor Fielding advised that she attended the Puslinch Lake Conservation Association Town Hall meeting at the Old Marina Restaurant on Tuesday, May 17<sup>th</sup>. Councillor Fielding advised that the meeting was well attended. Councillor Fielding advised that the dredging of the lake may not take place this year as the group may concentrate their efforts on silt removal from the pit. Councillor Fielding advised that there was an interesting drone video presentation at the meeting.



**12. UNFINISHED BUSINESS**

None.

**13. CLOSED MEETING**

**Council was in closed session from 6:46 p.m. to 6:52 p.m.**

**Council recessed from 6:53 p.m. to 7:00 p.m.**

- (a) Confidential Verbal Report from Karen Landry regarding litigation or potential litigation, advice that is subject to solicitor- client privilege, including communications necessary for that purpose, a proposed or pending acquisition or disposition of land by the municipality or local board and a request under *Municipal Freedom of Information and Privacy Act* – Plan 386.

**Resolution No. 2016-221:**

Moved by Councillor Roth and  
Seconded by Councillor Bulmer

That Council shall go into closed session under Section 239 of the Municipal Act for the purpose of:

- (a) Confidential Verbal Report from Karen Landry regarding litigation or potential litigation, advice that is subject to solicitor- client privilege, including communications necessary for that purpose and a proposed or pending acquisition or disposition of land by the municipality or local board and a request under *Municipal Freedom of Information and Privacy Act* – Plan 386.

**CARRIED**

**Resolution No. 2016-222:**

Moved by Councillor Roth and  
Seconded by Councillor Bulmer

That Council move into open session.

**CARRIED**

- (a) Confidential Verbal Report from Karen Landry regarding litigation or potential litigation, advice that is subject to solicitor- client privilege, including communications necessary for that purpose and a proposed or pending acquisition or disposition of land by the municipality or local board and a request under *Municipal Freedom of Information and Privacy Act* – Plan 386.

**Resolution No. 2016-223:**

Moved by Councillor Stokley and  
Seconded by Councillor Fielding

That Council receive the Confidential Verbal report from Karen Landry regarding litigation or potential litigation, advice that is subject to solicitor- client privilege, including communications necessary for that purpose and a proposed or pending acquisition or disposition of land by the municipality or local board and a request under *Municipal Freedom of Information and Privacy Act* – Plan 386; and

That Staff proceed as directed.

**CARRIED**

#### **14. BY-LAWS:**

- (a) A by-law to provide for the levy and collection of property taxes for the 2016 taxation year.— **Report FIN-2016-011.**

**Resolution 2016-224** Moved by Councillor Bulmer and  
Seconded by Councillor Roth

That the following By-laws be taken as read three times and finally passed in open Council:

- (a) By-law **031/16** being a by-law to provide for the levy and collection of property taxes for the 2016 taxation year.

**CARRIED**

## **15. CONFIRMING BY-LAW**

- (a) By-Law to confirm the proceedings of Council for the Corporation of the Township of Puslinch

**Resolution 2016-225:** Moved by Councillor Roth and  
Seconded by Councillor Bulmer

That the following By-law be taken as read three times and finally passed in open Council:

- (a) By-Law **032/16** being a by-law to confirm the proceedings of Council for the Corporation of the Township of Puslinch at its meeting held on the 18th day of May, 2016.

**CARRIED**

**16. ADJOURNMENT:**

**Resolution No. 2016-226:** Moved by Councillor Bulmer and  
Seconded by Councillor Roth

That Council hereby adjourns at 8:55 p.m.

**CARRIED**

Dennis Lever, Mayor

Karen Landry, CAO/Clerk





## THE TOWNSHIP OF PUSLINCH

### NOTICE OF PUBLIC MEETING

**TAKE NOTICE** that the Council of the Township of Puslinch will hold a public meeting on **Thursday the 23<sup>rd</sup> of June 2016, at 7:00 pm** in the Council Chambers at 7404 Wellington Road 34, to consider the proposed Zoning By-law Amendment, pursuant to the requirements of Section 34 of the Planning Act, R.S.O., 1990, as amended. The file number assigned to this application is **D14/HAY**.

**THE LAND SUBJECT** to the application is municipally known as 7128 Smith Road and legally known as Part Lots 24 & 25, Concession 3, 61R11766, Township of Puslinch. The subject lands are shown on the map below.

**THE PURPOSE AND EFFECT** of the application is to amend the Township of Puslinch's Zoning By-law 19/85 from an Agricultural (A) Zone to a Site Specific Agricultural Zone to permit a landscape contractor's yard with an office and outdoor storage of equipment and materials.

**ORAL OR WRITTEN SUBMISSIONS** may be made by the public either in support or in opposition to the proposed Zoning By-law Amendment. Any person may attend the public meeting and make an oral submission or direct a written submission to the Township Clerk at the address below. All those present at the public meeting will be given the opportunity to make an oral submission, however; it is requested that those who wish to address Council notify the Township Clerk in advance of the public meeting.

**TAKE NOTICE** that if a person or public body does not make an oral submission at a public meeting or make a written submission to the Township of Puslinch before the Zoning By-law is passed, the person or public body is not entitled to appeal the decision of the Council of the Township of Puslinch to the Ontario Municipal Board.

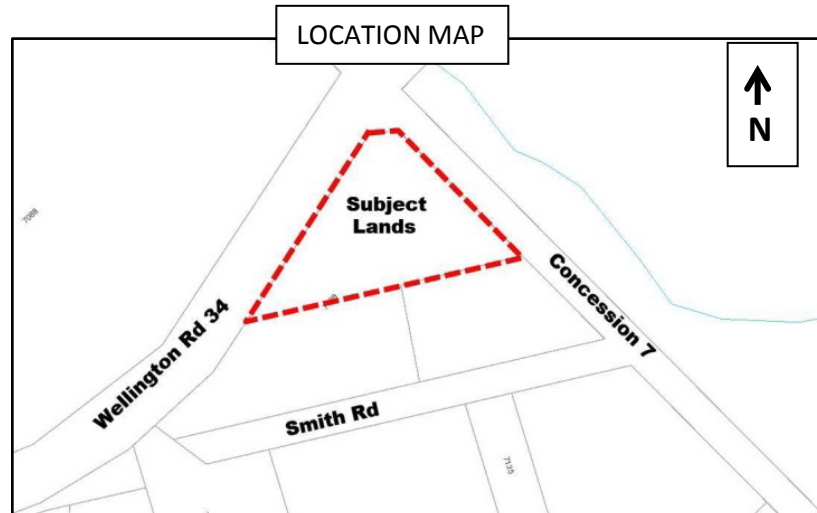
**AND TAKE NOTICE** that if a person or public body does not make an oral submission at a public meeting or make a written submission to the Township of Puslinch before the Zoning By-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Ontario Municipal Board unless, in the opinion of the Board, there are reasonable grounds to do so.

**REQUEST FOR NOTICE OF DECISION** regarding the Zoning By-law amendment must be made in written format to the Township Clerk at the address shown below.

**ADDITIONAL INFORMATION** regarding the proposed amendment is available for review between 9:00 a.m. and 4:30 p.m. at the Township of Puslinch Municipal Office as of the date of this notice. If you wish to express your views with respect to this application, please forward your comments to Kelly Patzer, Development Coordinator, [kpatzer@puslinch.ca](mailto:kpatzer@puslinch.ca).

Dated at the  
Township of Puslinch  
on this 20<sup>th</sup> day of May 2016.

Karen Landry  
CAO/Clerk  
Township of Puslinch  
7404 Wellington Road 34  
Guelph, Ontario N1H 6H9  
Phone (519) 763-1226  
[admin@puslinch.ca](mailto:admin@puslinch.ca)





## THE TOWNSHIP OF PUSLINCH

### NOTICE OF COMPLETE APPLICATION & PUBLIC MEETING

(revised key map)

**TAKE NOTICE** that pursuant to the requirements of the Planning Act, R.S.O., 1990, as amended, the Township of Puslinch has received a revised application to amend Zoning By-law 19/85. The file number assigned to this application is **D14/ONT**

**TAKE NOTICE** that the Council of the Township of Puslinch will hold a public meeting on **Thursday the 23<sup>rd</sup> of June 2016, at 7:00 pm** in the Council Chambers at 7404 Wellington Road 34, to consider the proposed Zoning By-law Amendment, pursuant to the requirements of Section 34 of the Planning Act, R.S.O., 1990, as amended.

**THE LAND SUBJECT** to the application is municipally known as 7456 McLean Road West and legally known as Rear Part Lot 25, Concession 7, RP 61R4472, Part 2, Township of Puslinch. The subject lands are shown on the inset map.

**THE PURPOSE AND EFFECT** of the application is to amend the Township of Puslinch's Zoning By-law 19/85 from Agricultural (A) Zone to Industrial (IND) Zone, to permit the development of an industrial mall including offices, truck repair shop and trailer parking. A definition for "Truck Repair Shop" is proposed to be added to the zoning applicable to the property.

**ORAL OR WRITTEN SUBMISSIONS** may be made by the public either in support or in opposition to the proposed Zoning By-law Amendment. Any person may attend the public meeting and make an oral submission or direct a written submission to the Township Clerk at the address below. All those present at the public meeting will be given the opportunity to make an oral submission, however; it is requested that those who wish to address Council notify the Township Clerk in advance of the public meeting.

**TAKE NOTICE** that if a person or public body does not make an oral submission at a public meeting or make a written submission to the Township of Puslinch before the Zoning By-law is passed, the person or public body is not entitled to appeal the decision of the Council of the Township of Puslinch to the Ontario Municipal Board.

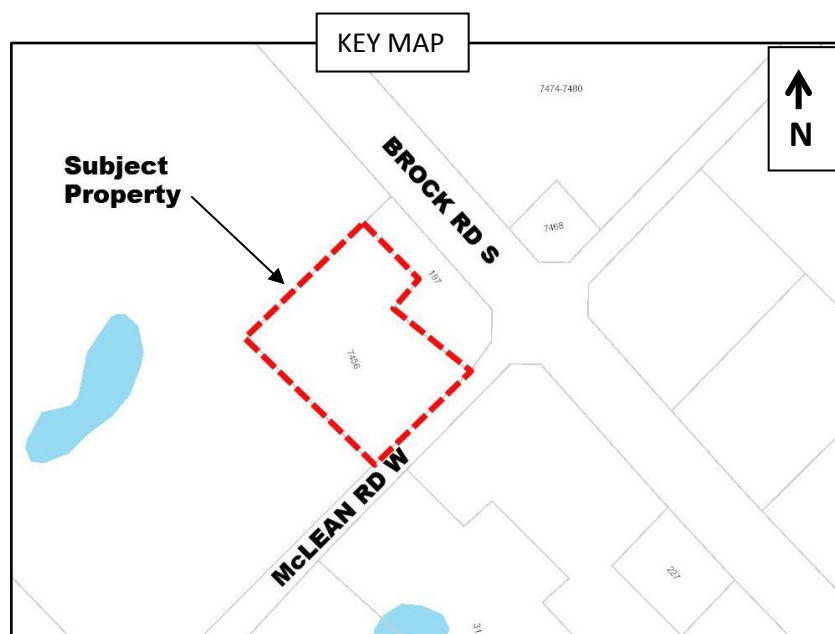
**AND TAKE NOTICE** that if a person or public body does not make an oral submission at a public meeting or make a written submission to the Township of Puslinch before the Zoning By-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Ontario Municipal Board unless, in the opinion of the Board, there are reasonable grounds to do so.

**REQUEST FOR NOTICE OF DECISION** regarding the Zoning By-law amendment must be made in written format to the Township Clerk at the address shown below.

**ADDITIONAL INFORMATION** regarding the proposed amendment is available for review between 9:00 a.m. and 4:30 p.m. at the Township of Puslinch Municipal Office as of the date of this notice. If you wish to express your views with respect to this application, please forward your comments to Kelly Patzer, Development Coordinator, [kpatzer@puslinch.ca](mailto:kpatzer@puslinch.ca).

Dated at the  
Township of Puslinch  
on this 20<sup>th</sup> day of May 2016.

Karen Landry  
CAO/Clerk  
Township of Puslinch  
7404 Wellington Road 34  
Guelph, Ontario N1H 6H9  
Phone (519) 763-1226  
[admin@puslinch.ca](mailto:admin@puslinch.ca)







## THE TOWNSHIP OF PUSLINCH

### NOTICE OF REVISED APPLICATION & PUBLIC MEETING

**TAKE NOTICE** that pursuant to the requirements of the Planning Act, R.S.O., 1990, as amended, the Township of Puslinch has received a revised application to amend Zoning By-law 19/85. The file number assigned to this application is **D14/J2K**

**TAKE NOTICE** that the Council of the Township of Puslinch will hold a public meeting on **Thursday the 23<sup>rd</sup> of June 2016, at 7:00 pm** in the Council Chambers at 7404 Wellington Road 34, to consider the proposed Zoning By-law Amendment, pursuant to the requirements of Section 34 of the Planning Act, R.S.O., 1990, as amended.

**THE LAND SUBJECT** to the application is municipally known as 0 Brock Road and legally known as Part Lot 26, Concession 7, RP 61R863, Parts 2, 3 & 4 Township of Puslinch. The subject lands are shown on the map below.

**THE PURPOSE AND EFFECT** of the application is to amend the Township of Puslinch's Zoning By-law 19/85 to rezone the lands from Agricultural (A) Zone to Highway Commercial (C2) Zone. There are no specific development plans associated with this zoning by-law amendment.

**ORAL OR WRITTEN SUBMISSIONS** may be made by the public either in support or in opposition to the proposed Zoning By-law Amendment. Any person may attend the public meeting and make an oral submission or direct a written submission to the Township Clerk at the address below. All those present at the public meeting will be given the opportunity to make an oral submission, however; it is requested that those who wish to address Council notify the Township Clerk in advance of the public meeting.

**TAKE NOTICE** that if a person or public body does not make an oral submission at a public meeting or make a written submission to the Township of Puslinch before the Zoning By-law is passed, the person or public body is not entitled to appeal the decision of the Council of the Township of Puslinch to the Ontario Municipal Board.

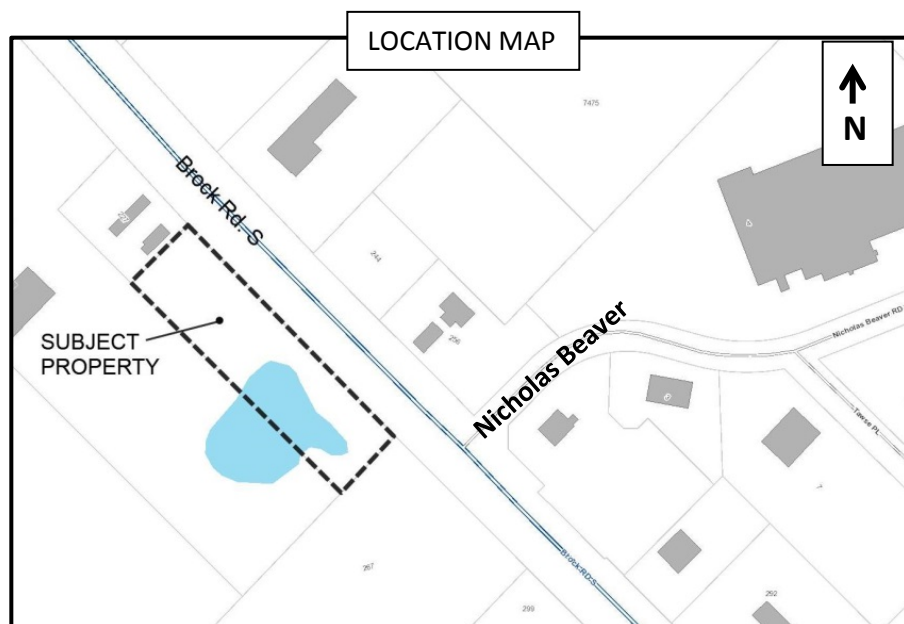
**AND TAKE NOTICE** that if a person or public body does not make an oral submission at a public meeting or make a written submission to the Township of Puslinch before the Zoning By-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Ontario Municipal Board unless, in the opinion of the Board, there are reasonable grounds to do so.

**REQUEST FOR NOTICE OF DECISION** regarding the Zoning By-law amendment must be made in written format to the Township Clerk at the address shown below.

**ADDITIONAL INFORMATION** regarding the proposed amendment is available for review between 9:00 a.m. and 4:30 p.m. at the Township of Puslinch Municipal Office as of the date of this notice. If you wish to express your views with respect to this application, please forward your comments to Kelly Patzer, Development Coordinator, [kpatzer@puslinch.ca](mailto:kpatzer@puslinch.ca).

Dated at the  
Township of Puslinch  
on this 20<sup>th</sup> day of May 2016.

Karen Landry  
CAO/Clerk  
Township of Puslinch  
7404 Wellington Road 34  
Guelph, Ontario N1H 6H9  
Phone (519) 763-1226  
[admin@puslinch.ca](mailto:admin@puslinch.ca)



May 17, 2016

James Etienne, P. Eng.  
Senior Water Resources Engineer  
Grand River Conservation Authority  
400 Clyde Road  
Cambridge, ON, N1R 5W6

Heather Malcolmson, P.Geo.  
Director  
Source Protection Programs Branch  
Ontario Ministry of the Environment and Climate Change  
40 St. Clair Avenue West, Floor 14  
Toronto, ON, M4V 1M2

Wellington Source Water Protection  
Risk Management Office  
7444 Wellington Road 21  
Elora, ON, N0B 1S0  
1-844-383-9800  
[sourcewater@centrewellington.ca](mailto:sourcewater@centrewellington.ca)  
[wellingtonwater.ca](http://wellingtonwater.ca)

Via Email and Regular Mail

Dear Mr. Etienne and Ms. Malcolmson,

**RE: Wellington County Municipal Peer Review Response Regarding Water Quantity Risk Assessment Report (Tier 3) – City of Guelph and Guelph / Eramosa Township Water Systems**

On behalf of Guelph / Eramosa Township, the Township of Puslinch, the Town of Erin and the County of Wellington, please find enclosed memorandums by the Township and Town hydrogeologists in response to the Matrix Solutions Inc. letters dated March 4 and 7, 2016 on the draft Tier 3 Water Budget and Local Area Risk Assessment for the City of Guelph and the Communities of Rockwood and Hamilton Drive (Water Quantity Risk Assessment report). The Matrix Solutions Inc. letters were in response to the review package submitted by our municipalities dated June 19, 2015 and form part of the municipal peer review process of the Water Quantity Risk Assessment Report that was initiated in May 2014 for Guelph / Eramosa Township and fall 2014 for the Township of Puslinch, Town of Erin and County of Wellington. We appreciate the opportunity to participate as a peer review for this study and with this letter and enclosed memorandums wish to once again express our concerns regarding the Water Quantity Risk Assessment.

As you are aware, our June 19, 2015 review package raised serious concerns regarding the science underpinning the Tier 3 model especially as it relates to the delineation of

Wellington Source Water Protection is a municipal partnership between Township of Centre Wellington | Town of Erin | Guelph / Eramosa Township | Township of Mapleton | Town of Minto | Township of Puslinch | Township of Wellington North | County of Wellington. The purpose of the *Clean Water Act* is to protect existing and future sources of drinking water.

the Well Head Protection Area – Quantity (WHPA Q1 / Q2) extent and significance level. These concerns remain following our review of Matrix Solutions Inc.’s response. Therefore, our municipalities strongly request that the hydrogeological studies and / or modelling necessary to address our outstanding review comments, be completed prior to the finalization of the Water Quantity Risk Assessment. Our reviewers have raised substantive concern, on a number of technical issues that directly affects the delineation of the WHPA Q1 / Q2 extent and significance level. Our concern is to ensure that the Tier 3 model is an accurate representation of field conditions and based on the best available science. The impact of inappropriately categorizing the significance level or from overestimating the extent of the WHPA –Q1 / Q2 could have long term consequences for our municipalities.

The Province has indicated that “Prior to the completion of the RMMEP, if the Wellington municipalities become aware of new information, it may be considered if its inclusion will have a significant impact on the Tier 3 results.” Our opinion is that our outstanding concerns are that new information and therefore it should be considered now prior to the completion of the Water Quantity Risk Assessment.

Our concerns are as follows:

1. It is established that the Eramosa River is a karst environment and that surface water / groundwater interactions are not fully understood. It is our opinion that the current response by Matrix Solutions Inc. does not adequately address the concerns presented by our reviewers especially in regards to complexity of the Eramosa River’s interaction with the municipal aquifer and the documented surface water loss. The change in significance level in 2014 from moderate to significant shows that the Tier 3 model is sensitive to changes proximal to the Arkell Spring Grounds. The area in question is closer to the Arkell Spring Grounds than the Rockwood data that led to the 2014 changes. Additionally, our initial analysis demonstrates that depending on the river volume loss, the area of potential WHPA-Q1 decrease could be significant and still maintain agreement on the water budget. The range of WHPA-Q1 decrease is calculated between 1,577 to 15,768 hectares depending on the river volume loss. In our view, this area is substantial and gives us great concern.
2. Further to our concern related to the Eramosa River surface water / groundwater interactions, we formally request that the Lake Erie Source Protection Region, Grand River Conservation Authority and / or the Province

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begin in 2016, the data collection necessary to verify the stream flow conditions documented by our municipal peer reviewers. Our municipalities feel that the collection of this stream flow rate data would assist in providing the best available and current science for the Tier 3 model. We note that the Grand River Conservation Authority and the MOECC have the necessary field staff and resources to conduct this type of study. We understand that Dr. Hugh Whiteley, a member of the Provincial Peer Review team, made a similar request in 2015.

3. In addition to the Eramosa River concern, our municipalities also have the following, outstanding concerns:
  - a. Expression of the Bedrock valley on the east side of Guelph
  - b. Geological interpretation outside of the City limits
  - c. Verification of drawdown by City of Guelph wells near Aberfoyle
  - d. Accounting for reduced municipal pumping during drought scenarios
4. Prior to a final determination on our municipal peer reviewers' concerns, our municipalities request an opportunity to present our concerns directly to the Provincial Peer Review team. In preparation for that, we would expect that the Provincial Peer Review team will be provided the entire history of our municipal peer review including previous memorandums and responses.
5. The Province has indicated that, in their opinion, consultation has been sufficient and, in order to meet the Minister's deadline of December 31, 2017, that the next technical phases of the Guelph / Guelph Eramosa Tier 3 project should begin (the Risk Management Measures Evaluation Project (RMMEP) and policy development). At this time, we respectfully disagree with that conclusion. Our municipalities remain concerned regarding the Minister's deadline of December 31, 2017 for completion of all technical work and policy development. We feel that this date sets an artificial and rushed deadline for completion of this important work. Although we recognize that the City of Guelph, GRCA and Province have been working on the Tier 3 model since 2008, our municipalities were first involved only in 2014. This late involvement, in our opinion, has directly led to our outstanding concerns. This six year delay in our municipal involvement was an oversight that the Province noted in 2015. If our municipalities had been involved earlier, our concerns could have been

incorporated directly into the development of the Tier 3 model and perhaps a December 31, 2017 deadline would have been feasible under those circumstances.

6. Our municipalities also request clarification on access and ownership of the Tier 3 model, once final. We understand that discussions are ongoing between the Province, the City of Guelph and Lake Erie Source Protection Region. We further understand, through our participation on the screening tool working group, that the Province is working on screening tools that may partially address this question. Our municipalities will need access to the Tier 3 model for the review of certain development applications and for management of the Guelph/Eramosa Township municipal water supply.

In the current context, to properly address our outstanding concerns and to allow sufficient time to complete the finalization of the Water Quantity Risk Assessment, Risk Management Measures Evaluation Process and policy development, a deadline of December 31, 2017 does not seem realistic. In particular, we strongly feel that council, public and industry consultation should not be rushed. As you are aware, there is a significant interest by the public, our Councils, our residents and non-governmental organizations regarding water taking in Wellington County in part due to the density of existing, commercial and industrial water users. These factors result in the need for a thorough consultation process. All of these efforts will take time, time that is in short supply if the December 31, 2017 deadline is to be met. We respectfully request that the Minister reconsider the timeline that has been set for this project.

We respectfully request that if the Province must finalize the Water Quantity Risk Assessment under their current timeline that the Province considers accepting it with a moderate risk level until such a time that the outstanding concerns can be addressed. It is noted within the draft Water Quantity Risk Assessment Report that the original significance level established was a moderate risk. The risk level was raised to significant due to a high level of uncertainty related to the ability of one municipal well (Arnell 1) being able to meet its allocated rate. The report notes (page 133) that for the majority of municipal wells that the uncertainty with respect to pumping allocated rates is low and that the allocated rates are sustainable. Therefore, we note that, without this high uncertainty for Arnell 1, the risk level would be moderate under the Technical Rules. Our preference, as stated above, would be to complete the necessary work to address our reviewers' concerns prior to the Water Quantity Risk Assessment acceptance, however, acceptance with



a moderate risk level could be equally effective to allow further work during the Risk Management Measures Evaluation Process to confirm the appropriate risk level. Our interpretation of Technical Rule 109 is that the factors that shall be considered in the uncertainty analysis include the relevance of the available input data and the ability of the methods and models used to accurately reflect the hydrologic system. Our opinion is that our reviewers have identified additional input data that should be considered as well as identifying that the current model does not appear to accurately reflect the hydrologic system, especially in the Eramosa River / Blue Springs Creek area. As outlined by our reviewers, this may have the effect of increasing the recharge for the area around Arkell 1 which would, in turn, lower the uncertainty. Given these differing opinions, we feel it would be appropriate to closely consider the uncertainty analysis.

Wellington Source Water Protection  
Risk Management Office  
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[wellingtonwater.ca](http://wellingtonwater.ca)

We are aware of the efforts of Lake Erie Source Protection Region staff to develop a work plan for the remaining phases of the Tier 3 project (finalization of the Water Quantity Risk Assessment, Risk Management Measures Evaluation Process and policy development). Our municipalities are committed to our continued engagement in this process, including participation on the steering committee, and look forward to continued discussion. In particular, we wish to confirm the process and timeline for council, public and industry consultation including the opportunity for stakeholder and public input. This is an important report that has long term impacts for City and County residents and as such, our municipalities will continue our involvement in the review of the technical work and in development of water quantity policy.

If you require further information, please contact Kyle Davis at 519-846-9691 ext 362.

Regards,



Ian Roger, P. Eng.  
Chief Administrative Officer  
Guelph / Eramosa Township



Karen Landry  
Chief Administrative Officer / Clerk  
Township of Puslinch



Kathryn Ironmonger  
Town Manager / Chief Administrative Officer  
Town of Erin



Kyle Davis  
Risk Management Official  
Wellington Source Water Protection

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Risk Management Office  
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C.C.

Via E-mail

Gary Cousins, Director of Planning – County of Wellington

Martin Keller – Grand River Conservation Authority

Dave Belanger – City of Guelph

Peter Rider – City of Guelph

Kathryn Baker – Ontario Ministry of Environment and Climate Change

Scott Bates – Ontario Ministry of Natural Resources and Forestry

Dale Murray – Lake Erie Source Protection Committee

#### Attachments

Memorandums – RJ Burnside, Harden Environmental and Blackport Hydrogeology

# Memo

**To:** Kyle Davis, Township of Centre Wellington  
**From:** Ray Blackport, Blackport Hydrogeology Inc.  
**CC:** Kathryn Ironmonger, Town of Erin  
**Date:** May 16, 2016  
**Re:** Comments, City of Guelph, Tier 3 Water Quantity Risk Assessment and the Guelph/Wellington County Water Quantity Risk Management Work Plan

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**Note-** Comments were originally provided June 10, 2015 on behalf of the Town of Erin. Matrix Solutions Inc. (Matrix) provided a response, dated March 7, 2016, on behalf of the City of Guelph and Lake Erie Source Protection Region. Comments were discussed in a meeting of all parties on April 1, 2016. All comments were addressed in the meeting, as highlighted below.

## 1.0 Background and Scope of Review

### Background

The City of Guelph conducted a Tier Three Water Budget and Local Area Risk Assessment (Tier Three Assessment) as a requirement under the Clean Water Act for the Province of Ontario. Previous water quantity studies, completed at the watershed scale, classified the local subwatershed as having a moderate to significant water demand due to high water supply usage. The findings of the Guelph/Guelph-Eramosa Tier Three Water Quantity Risk Assessment concluded that there is a “significant” water quantity risk level encompassing a large area of City of Guelph, the Townships of Guelph/Eramosa and Puslinch and the Town of Erin. Three areas were identified as being vulnerable to water quantity threats, two being groundwater vulnerable areas (WHPA-Q1 and WHPA-Q2) and one being a surface water vulnerable area (IPZ-Q). The WHPA-Q1 area is the cone of influence of each municipal well, including the cones of influence of wells the each well it intersects. The WHPA-Q2 area is the land area where recharge has the potential to have a measurable impact on water levels at the municipal wells. The IPZ-Q area is the drainage area and associated recharge area that contribute to a surface water intake.

Several meetings were held to discuss the findings of the Draft Tier Three Assessment. Concerns were raised at the March 24<sup>th</sup>, 2015 meeting with respect to the decision to apply a “significant”



water quantity risk designation to the Guelph water supply in the Tier Three Assessment. The Grand River Conservation Authority (GRCA) provided a summary of the chronology of the investigations and technical reassessments of the Risk Assignment in a Memo dated April 20, 2015.

### **Scope of Review**

The primary focus of this review is to provide comments, on behalf of the Town of Erin, with respect to the Draft Tier 3 Water Quantity Risk Assessment (WQRA) Report for the City of Guelph Water system, as related to potential water quantity concerns within the geographic area of the Town of Erin. It was also requested that a review of the Work Plan for the “Water Quantity Risk Management Measures Evaluation Process” (RMMEP) be completed. It is noted that with respect to the Town of Erin, there are no WHPA-Q1 and WHPA-Q2 areas for the City of Guelph and Village of Rockwood water supply systems, which extend into the geographic boundaries of the Town of Erin. Only the surface water quantity area (IPZ-Q) extends into the geographic limits of the Town and as such the scope of review is limited to reviewing the WQRA report in relation to the IPZ-Q and to providing general comments on the RMMEP Work Plan.

## **1. Water Quantity Risk Assessment**

### *a. Groundwater*

#### *i. Geology/Hydrogeology*

From the perspective of the Town of Erin, there are no groundwater related water quantity concerns within the Town boundaries, related to the Guelph WQRA Tier Three Assessment. The groundwater capture areas of the municipal water supply wells for the City of Guelph do not extend into the Town of Erin and, as such, an assessment of the geology and hydrogeology was not conducted. It is noted that extensive testing of the Arkell Spring grounds municipal well field has been conducted over the last three years and the findings show that the capture zones do not extend into the Town of Erin. It is also noted that a characterization update was conducted for the area around Rockwood, as part of the Tier 3 Water Budget and Local Area Risk Assessment. No update on the Wellhead Protection zones was provided; however, based on the previous information found in the Grand River Source Protection Plan (2013), the Wellhead Protection Zones are shown to extend into the Town of Erin but there are no water quantity threats with the Town.

#### *ii. Municipal Wells*

Not applicable for the Town of Erin.

#### *iii. Delineation of WHPA – Q1 and Q2 – Application of Technical Rules*

This is beyond the scope of review for the Town of Erin as the WHPA-Q1 and WHPA-Q2 do not extend into the Town of Erin.

#### *b. Surface Water*

The IPZ-Q for the City of Guelph water supply is interpreted to be the entire Eramosa-Blue Springs Creek watershed upstream of the Arkell Spring Grounds Intake on the Eramosa River (Figure 5-4 of the Tier Three Assessment Report). Since the intake is on the Eramosa River, all of the upstream drainage area and associated recharge area of the Eramosa River and Blue Springs Creek is considered to contribute to the surface water intake. The surface water pumped from the Eramosa River is not directly fed into the municipal drinking water system but is diverted into an artificial recharge system where the water is “stored” in the shallow aquifer and then pumped out, treated and made available for the municipal supply system. The water taking from the surface water is constrained, based on a specified river flow rate required to maintain sufficient flow for operation of the wastewater treatment plant.

#### *i. Hydrology*

The hydrology and flow rates in the Eramosa River have been investigated in detail for decades. In recent years discharge at the Eramosa intake has fallen below the threshold level (for operation of the Waste Water Treatment Plant on several occasions; however, this has not impacted the drinking water quantity as make up water, if needed, can be derived from storage within the artificial recharge system and from water supply wells at the Arkell Spring Grounds.

#### *ii. Delineation of IPZ-Q – Application of Technical Rules*

Part VI.7 of the Technical Rules was applied (page 94 of the Tier Three Assessment Report) appropriately. Simulated particle tracking was used to assess potential recharge to the watershed, through the groundwater system outside the watershed boundaries. Given the uncertainty in the groundwater divide and the limited recharge contribution in this area, this additional area was removed, to constrain the IPZ-Q to within the Grand River watershed boundary.

#### Additional Considerations

It was noted in the Tier Three Assessment Report (page 99) that the Surface Water Vulnerable Area (IPZ-Q) was assigned the same Risk Level as the groundwater vulnerable area containing the groundwater collector system (Glen Collector) at the Arkell Spring Grounds, where the surface water used in the system is discharged. This was done since the water pumped from the Eramosa intake is not fed directly into the drinking water system but into the groundwater collector, which was included in the Risk Assessment for groundwater. Although the same Risk Level is assigned across the large drainage area upstream of the Arkell surface water intake, there will be a highly variable level of “real risk” across this area, especially in the upstream areas of the watershed.

## 2. Water Quantity Risk Management Measures Evaluation Process Work Plan

As indicated in the Work Plan, the Risk Management Measures Evaluation Process (RMMEP) the water quantity policies must address one of the prescribed drinking water threats, and, as a result may or may not address some of the factors considered in setting the risk level for a local area. There are two water quantity prescribed drinking water threats:

- an activity that takes water from an aquifer or a surface water body without returning the water taken to the same aquifer or surface water body; and,
- an activity that reduces recharge to the aquifer.

As indicated in the introduction to the Water Quantity RMMEP, the objective of the RMMEP is to provide a methodology to select risk management measures that would manage significant threat activities so that they cease to become significant drinking water threats. The following comments are provided with respect to the RMMEP Work Plan.

### Task 1: Review - Identification of Drinking Water Quantity Threats

I generally agree with the proposed work plan; however, it is important that whomever is undertaking the RMMEP is familiar with the existing Tier 3 assessment, as it may be overkill for the consultant to update and refine threats, identify additional wells/intakes for impact assessment etc., given how much work has gone into the Tier 3 assessment (i.e. was that not the point of the Tier 3 assessment?).

**Matrix Response** – agreed, and it was indicated that Matrix will be completing both tasks.

### Task 2: Where Required, Identify Percentage Impacts and Rank the Tier 3 Local Area Significant Threats

- Have not some of the scenarios presented in Table 1 already been performed as part of the Tier 3 assessment (e.g. modelling pumping at the permitted rates)?
- Realistic consumptive and non-consumptive use should be refined, where possible, for many of the scenarios in Table 1. For example, most rural non-permitted water taking (e.g. private wells) is non-consumptive; water is typically removed from the lower bedrock aquifer and returned via septic systems to the shallow aquifer. In the case of the Guelph WQRA, (i.e. IPZ-Q, surface water only risks in the Town of Erin), the potential impact from this type of water taking within the Town of Erin, would be minimal and

would in fact potentially enhance discharge to the surface water, as recharge to the shallow groundwater is effectively increased.

- Part of the risk ranking and potential level of water quantity impact will depend on the location or distance from the municipal well or intake and local and regional geologic conditions (e.g. where is the main recharge area of the municipal wells and the distance this is from the wells). Is the use of the term “recharge” referring to recharge to the water supply aquifer (e.g. there is big difference between local recharge to an unconfined shallow aquifer and regional recharge to a deeper confined aquifer). It is noted for example, in the Conclusions (page viii of the Tier 3 Assessment report) that: *“Recharge reductions in response to future land developments, have a minimal impact on water levels at the Tier Three municipal pumping wells. The Gasport aquifer is protected in most area by the Vinemount aquitard which reduces the impact of reduced groundwater recharge on water levels in the aquifer. With respect to the City of Guelph and community of Rockwood, future land developments generally occur around the periphery of these communities with minimal increase in imperviousness over the Local Area.”*

**Matrix Responses** – *Bullet 1 - There will not be a duplication of Tier 3 Assessment scenarios. Bullet 2 – Matrix agrees with the comment, that there would be minimal impact to water quantity within the IPZ-Q zone from activities within the Town of Erin. Bullet 3 – Recharge is simply defined as water entering the groundwater system at ground surface.*

**Task 3: Select Preliminary Risk Management Measures (RMMs) and Evaluate the Risk Management Measures**

- It would appear that there are two components to this that should be explored together. The operational aspects are important, as purely from an operational risk perspective there may be operational procedures to optimize the city-wide water system, while there may be Risk Management measures to aid in maintaining overall recharge to the aquifer system or decrease withdrawal from the aquifer system.

**Matrix Response** – *Matrix agrees with the comment.*

**Task 4: Prepare a “Draft Threats Management Strategy” to discuss with Municipalities and Stakeholders.**

- The key will be consultation throughout the previous tasks to ensure there is a reasonable consensus moving forward.

**Matrix Response** – *Matrix agrees with the comment.*

### 3. Conclusions

#### Implications for the Town of Erin

There are no groundwater related concerns regarding the Tier Three Assessment for the City of Guelph, given that the capture zones for the Guelph system do not extend into the Town of Erin and there are no groundwater quantity threats. From a surface water perspective, the Surface Water Vulnerable Area (IPZ-Q) extends into the Town of Erin upstream of the Arkell Spring Grounds Intake. It is not expected that there would be any impact on water quantity from activities within the Town of Erin, given several factors:

- Any increase in impervious areas as a result of development, which will be a substantial distance upstream of the intake, would potentially increase surface water flow rather than decrease surface water flow.
- Most rural wells obtain water from the deeper aquifer system and “recycle” the water via septic systems to the shallow groundwater system, increasing the overall recharge to the shallow groundwater system and the potential discharge to the surface water system.
- The Town of Erin is the most upstream portion of the watershed and least developed so it is unlikely that there would be an impact on the surface water system that could be measured downstream at the Arkell Spring Grounds Intake.

**Matrix Response** – *Matrix agrees that “there are limited implications for the Town of Erin and the Town should be consulted to assess the need and implications of measures that are recommended that could impact land use or land use activities”.*

### 4. Recommendations

It is not anticipated that any activity within the Town of Erin could measurably impact the quantity of surface water at the Arkell Spring Grounds Intake. If measures are recommended for the RMMEP that could potentially impact land use or land use activities in the Town of Erin the Town should be consulted to assess the need and the implications.



May 10, 2016

**Via: Email**

Mr. Kyle Davis  
Risk Management Official  
County of Wellington  
7444 Wellington Road 21  
Elora ON N0B 1S0

Dear Kyle:

**Re: Comments on the Draft City of Guelph/Township of Guelph/Eramosa Tier Three  
Water Quantity Risk Assessment  
Project No.: 300036495.0000**

R.J. Burnside & Associates Limited (Burnside) was requested by the Township of Guelph/Eramosa to review the Matrix Solutions Incorporated (Matrix) Draft City of Guelph and Communities of Rockwood and Hamilton Drive Tier Three Water Budget and Local Area Risk Assessment. Our response to the draft report was provided in May 2015. As a follow up to this initial review Burnside received and reviewed responses from Matrix in a memorandum dated March 4, 2016. The following are our comments on the Matrix memorandum dated March 4, 2016.

### **3.1 Surface water leakage into Bedrock Aquifer**

The response provided by Matrix is similar to those provided on the same issue as raised by Harden Environmental Services Ltd. (Mr. Stan Denhoed, M.Sc., P.Eng.). Matrix indicates that an attempt was made to adjust the model to the observed water losses noted by Mr. Denhoed, however they were unable to replicate these losses in the model. Matrix then goes on to suggest that there may be other hydrogeological explanations for the noted occurrence. Matrix uses the fact that their model is calibrated to known target data to suggest that the calibration is itself an indicator that the model is correct. We note that a well calibrated model is one that matches reality in both a quantitative sense where the water balance and water levels match observed levels and also qualitatively where known discharge and recharge areas and flow directions are maintained. In light of the inability of the model to match the loss of water in the river we are unable to support Matrix's conclusion that the model is correct while ignoring the fact that it does not represent a significant occurrence that has been documented in the field versus an opposite estimated occurrence in a computer model.

We note that a paper presented by Messrs. Frank Brunton and David Belanger at the 60<sup>th</sup> Canadian Geotechnical Conference in 2007 included the following Figure 1. It is an idealized cross section through the area of the Eramosa River that is in question. It shows the potential for rapid movement from the surface into deeper sections of the carbonated bedrock aquifer as part of the documented Karst topography in the area of the Eramosa River. The caption for this figure states "Key recharge areas are located to the east and northeast of Guelph where precipitation/runoff quickly penetrate into the Amabel bedrock aquifers".

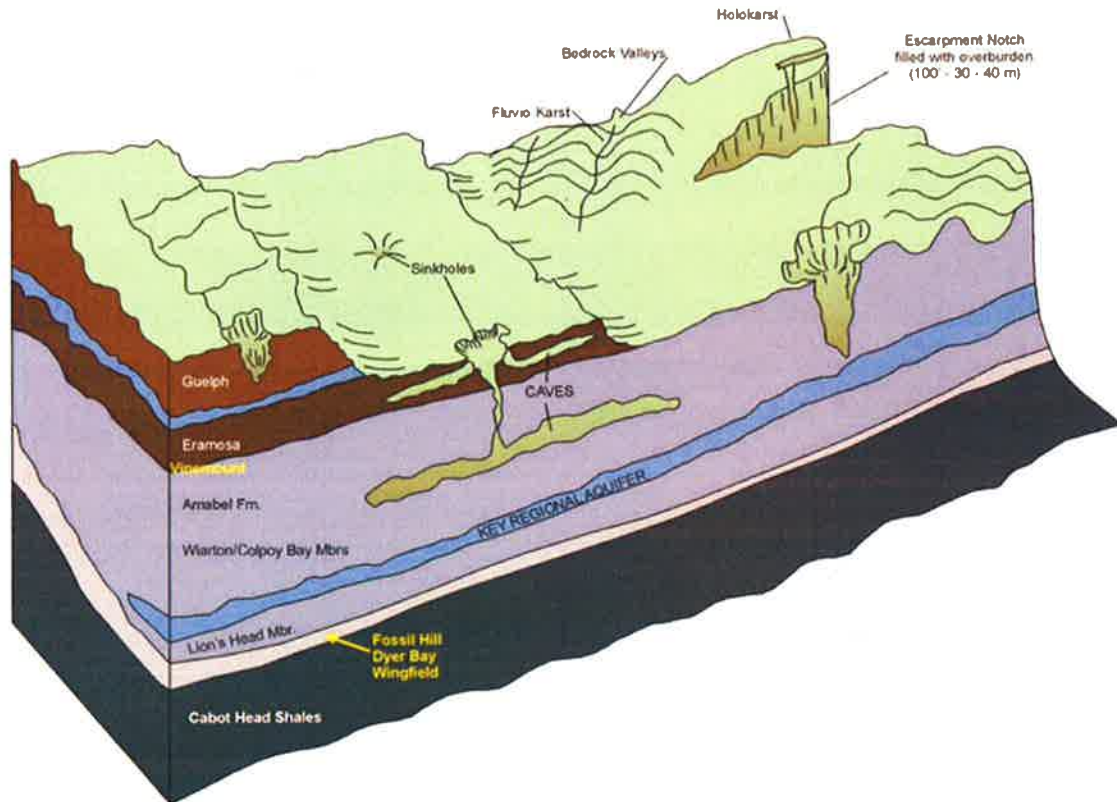


Figure 1. Idealized cross-section of Niagara Escarpment (view to NNE) showing regional relationships of Silurian caprock carbonate succession and resultant cuesta profiles of eastern Michigan Basin (west to east transect, Guelph-Milton, approx. 10-40 km across). The Amabel Formation forms the caprock and prominent cliffs of Niagara Escarpment margin in Ontario. The City of Guelph, located west of the escarpment margin, possesses much less pronounced cuestas of Guelph and Eramosa rock units. Overburden thickness (not depicted in diagram) is highly variable in this region with extensive areas of exposed bedrock and/or thin-drift cover (<3 m thick) to east of Guelph. Relative thicknesses of rock units are not to scale – in study area the Amabel Fm averages 38 m; the Eramosa Fm averages 18 m; and the Guelph Fm averages 20 m. Key recharge areas are located to east and northeast of Guelph where precipitation/runoff quickly penetrate into the Amabel bedrock aquifers and follows the karst-influenced stratigraphic plumbing system down dip (southwesterly) to eventually flow more southerly towards Lake Erie. Preliminary conodont biostratigraphic analyses indicates Fossil Hill Fm correlates with Meritton Fm to south, and the Lions Head Mbr of Amabel Fm correlates with Rockway Fm (Appalachian Basin stratigraphic nomenclature after Blair and McFarland 1992 and Brett et al. 1995). Recent mapping in Rockwood area, southeast of Guelph, suggests that Vinemount equivalent shales are present between the Amabel Fm and basal Eramosa Fm lithofacies.

Source  
Brinton, F.R., Belanger, D., Doherty, S., Yungworth, G. and Boonstra, G. 2007. Caprock carbonate stratigraphy and bedrock aquifer character of the Niagara Escarpment – City of Guelph Region, southern Ontario. in Proceedings, 80th Canadian Geotechnical Conference and the 8th joint CGS/IAH Conference, Canadian Geotechnical Society, Ottawa, Ontario, Canada p. 372.

This interpretation of the geology would support the observed loss in flow in the Eramosa River that has been documented by Mr. Stan Denhoed. The impact of the loss of flow in the Eramosa River is important to the hydrogeology of the area and we believe that the impact of the loss needs to be included in the model in light of previously demonstrated sensitivity of the model to input parameters in this area as outlined below.

The significance of the loss of flow from the Eramosa River to the aquifer in this area is important to the designation of the water quantity risk level as “significant” instead of “moderate”. In a memorandum dated April 20, 2015, James Etienne of the GRCA indicated that the following changes were made to the model:

- *The top of bedrock surface was refined in the area surrounding Rockwood and to the northeast (in the direction of the previous 2006 capture zones for the Rockwood wells).*
- *There is a buried bedrock valley to the west of Rockwood that stretches to the northeast beneath Erin. The characterization of the buried valley was adjusted close to Rockwood based on the new bedrock surface noted above. The material infilling this valley was refined from the first study based on OGS drilling information. In most places this resulted in coarser material which changed the interaction between the bedrock aquifers and the overburden and surface water system. This led to a slight decrease in water levels in Rockwood and slight increases in groundwater discharge in the Eramosa River.*
- *Pumping rates for Rockwood were revised with updated data and Well 3 was added. The first draft model used data from 2002 that was reported in the Wellington County Groundwater Protection Study (Golder, 2006)-Rockwood Wells 1 and 2 were pumped at a total of 751 m<sup>3</sup>/d and that pumping rate was held constant for the future scenario. With the GET Tier Three update, the current condition pumping rates for the three Rockwood Wells increased to 2009/2010 pumping rates for a total of 967 m<sup>3</sup>/d, and the future (allocated) rates were set at 1,152 m<sup>3</sup>/d. Thus there was a total increase of 401 m<sup>3</sup>/d in the Rockwood Wells under the future conditions in the final Guelph/GET Tier Three WQRA as compared to the draft Guelph Tier Three WQRA.*
- *Other geologic refinements were made for the area north of Hamilton Drive that impacted results in the north of the city-e.g., Emma Well.*

The memorandum concludes that the updates made to the GET Tier Three model combined to change the supply of water such that under the drought scenario, water levels were lower in the Arkell 1, Carter, Emma and Water Street Wells. It is our understanding that the Arkell 1 well is the main trigger for the ‘significant’ designation. In the context of the demonstrated sensitivity of the model to changes in the Rockwood area the suggested leakage from the river would present a change to the model that is more proximal to the Arkell 1 well than any of the changes that caused the change of designation to significant. It is therefore counter intuitive to the modelling process to suggest that these changes would be insignificant when other changes have proven to require a change in designation.

In light of the above, we remain unconvinced that the model adequately addresses the losses of water from the Eramosa River and are also unconvinced that the correct inclusion of this change will result in no changes to the model output.

### **3.2 Expression of the Bedrock Valley on east side of Guelph**

The Matrix response indicates that there were no restrictions introduced to the model by the interpolation method and that in fact the extent of the valley may have been overestimated. In our opinion, the overestimation of the extent of the valley is no more accurate than the underestimation of the valley. As we suggested in our previous comments the fact that the valley has undulations that match the road network indicate that the form of the valley was determined based on available data (and lack of it in the wider areas). As interpreted, the valley does not represent a natural feature as natural features are not known to have undulations that match the road network. As part of our review we have examined the Ontario Geologic Survey's Groundwater Resources Report 15 (OGS, 2016) and have noted that the OGS report supports a more linear interpretation for the bedrock valley.



### 3.3 Eramosa Formation Aquitard

The extent of the Eramosa Formation in the area of Rockwood has been reduced so that the hydraulic conductivity of the upper bedrock has been increased from  $3 \text{ to } 8 \times 10^{-8} \text{ m/s}$  to  $2 \times 10^{-7} \text{ m/s}$ . Response of the shallow bedrock formations to pumping of Rockwood Wells 3 and 4 continues to be underestimated by the model. This may indicate a further increase in the shallow bedrock hydraulic conductivity in the local area is warranted.

### 3.4 Existing Plus Committed Demands and Allocated Rates

Updated information has been included and we have **no further comment**.

### 3.5 Safe Additional Available Drawdown (SAAD)

The SAAD for the Guelph Eramosa Wells provided by Burnside based on a detailed interpretation of the water level response in the production wells has been adopted for use in the revised Tier Three report as required in the Tier Three rules. **No further comment**.

### 3.6 Rockwood Well 4

The Rockwood Well 4 was included in the 2001 Rockwood Water supply EA and was constructed in 2015. This well was included in the GRCA Assessment Report for water quality threats and has now been added to the Tier Three assessment as requested. **No further comment**.

### 3.7 Report Name

The name of the report has been changed from *City of Guelph, and Communities of Rockwood and Hamilton Drive Tier Three Water Budget and Local Area Risk Assessment* to *City of Guelph/ Township of Guelph/Eramosa Tier Three Water Quantity Risk Assessment*, as requested. **No further comment**.

## Summary

The municipalities surrounding Guelph were invited into the Tier Three study in January 2014. The work completed prior to this date focused on the City of Guelph. Work completed since January 2014 was an effort to fit the data from the surrounding municipalities into the Guelph Model. We are aware of the tremendous level of effort and detail that went into the model within the boundaries of the City of Guelph and are concerned that a similar level of effort is not apparent for work in the surrounding townships which are in our opinion, equally as important to the groundwater regime.

Throughout the process of our review Matrix has pointed out that the model is defensible and has sought to present information that 'defends' the model. In our opinion a carefully constructed model that adequately represents actual field conditions is its own defense and does not need to be 'defended'. It is important to note the argument that the model is correct because, the water balance matches is a circular argument based on conditions all internal to the model and the assumed conditions that it represents. Not being able to match environmental conditions does not in our mind suggest that we should ignore nature or seek to explain it away. In our minds the correct response to observed field data is a two-step process:

1. Verify the observations.

2. Update the conceptualization based on the verified data.

This approach has clearly been completed within the City of Guelph prior to 2011; a similar level of effort has not been completed in the surrounding municipalities.

We note that there has been a request made by the Risk Management Official (Kyle Davis) via email on April 18, 2016 to have data necessary to address the concerns regarding potential water loss to the Eramosa River collected in 2016. The provision of this data would support the fulfillment of the aims of the Tier Three Water Budget and Local Area Assessment as outlined in the "Water Budget & Water Quantity Risk Assessment Guide-Drinking Water Source Protection Program." MNR and MOECC, 2011. Which states:

*"The Tier Three water budget uses detailed groundwater and/or surface water numerical models on a more local scale. These models should be developed with the accuracy and refinement needed to evaluate hydrologic or hydrogeologic conditions directly at a water supply well or surface water intake..."* (page 79)

The guidance further states that:

*"The modelling should also simulate impacts from water takings, related to permitted water users and non-permitted water use where significant. The approach must be able to consider land use and projected land use changes as they affect recharge to groundwater, and should represent groundwater discharge to stream and any other relevant groundwater/surface water interactions."* (page 83)

In our opinion the guidance suggests that the Tier Three is intended to be a sound model that adequately represents the existing conditions on a more local scale. In light of the above, we trust that moving forward the model will be updated with the best possible information to improve calibration. Localized adjustment of hydraulic conductivity similar to work completed in Guelph and Rockwood Well 3 should be completed in the surrounding municipalities to better represent areas where there may be above average aquifer recharge related to the karst topography. We are willing to attend a technical meeting with the modelling team and discuss the conceptualizations of the hydrogeology of the area along with other supporting materials and data in order to ensure that the model is based on the best available data.

We trust this review is suitable. If you have any questions, please contact the undersigned.

Yours truly,

**R.J. Burnside & Associates Limited**



Dwight Smikle, P.Geo.  
Senior Hydrogeologist  
DS/JB:mp



Jim Baxter, P.Eng.  
Groundwater Resource Engineer

Enclosure(s)

cc: Mr. Ian Roger, Township of Guelph-Eramosa (enc.) (Via: email)





Harden Environmental Services Ltd.  
4622 Nassagaweya-Puslinch Townline  
R.R. 1, Moffat, Ontario, L0P 1J0  
Phone: (519) 826-0099 Fax: (519) 826-9099

Groundwater Studies

Geochemistry

Phase I / II

Regional Flow Studies

Contaminant Investigations

OMB Hearings

Water Quality Sampling

Monitoring

Groundwater Protection  
Studies

Groundwater Modelling

Groundwater Mapping

File: 1417

April 22, 2016

To: Kyle Davis – Risk Management Official – County of Wellington

From: Stan Denhoed, P.Eng. – Harden Environmental Services Ltd.

**Re: City of Guelph and Communities of Rockwood and Hamilton  
Drive Tier 3: Matrix Solutions Inc. Letter of March 4, 2016**

## **2.1 Eramosa River as Groundwater Discharge Zone**

The response provided by Matrix Solutions does not resolve the issue of the measured loss of river water in the Eramosa River between Indian Line and the Eden Mill Pond Association Station 3 just upstream of the confluence of the Eramosa River and Blue Springs Creek. The response acknowledges that the measured recharge via the river to the aquifer cannot be replicated by the model. It is postulated that the water re-emerges elsewhere upstream of Watson Road where the model is said to provide reasonable match to baseflow and overall water budget.

Streamflow measurements obtained on July 18, 2013 are very similar to the baseflow calibrated 2014 model with 800 L/s upstream of Eden Mills and 1500 L/s at Watson Road. However, the streamflow measurements provide greater detail and show that 250 L/s are lost from the river upstream of the confluence with Blue Springs Creek. This is not accounted for in the model. Also, with respect to overall water budget, there are many ways to satisfy the overall water budget such as balancing river losses with infiltration. The significance of the method of groundwater recharge is presented in Table 1 which estimates the required area of the WHPA-Q1 needed to compensate for the unaccounted recharge in the river. This evaluation is based on a recharge value of 200 mm/year occurring to the Gasport aquifer where it subcrops.

**Table 1: Area Needed To Compensate for Unaccounted River Volume Loss**

River Volume Loss (L/s)	Compensating Area (ha)	Compensating Area (km <sup>2</sup> )
100	1,577	1.6
250	3,942	3.9
500	7,884	7.9
1000	15,768	15.8

Depending on the river volume loss, the area of potential WHPA-Q1 decrease could be significant and still maintain agreement on the water budget.

We are not discussing a 100 m reach of the river as Scott Bates said in the April 1, 2016 meeting. This is a discussion of a significant volume of water that is not presently accounted for in the model that has important influence on the size, shape of the WHPA-Q1 and the risk level assignment.

On August 8, 2015 Dr. Hugh Whiteley, a provincially appointed peer reviewer of the Tier 3 study, presented evidence to the GRCA, City of Guelph and Matrix Solutions Inc. that there are significant losses measured in the Eramosa River upstream of Watson Road and suggested that verification of the flow losses be confirmed. For relatively little expenditure of money, detailed information on the flow loss could be obtained such as which reach of the river the greatest loss occurs. Dr. Whiteley's estimated loss of up to 1150 L/s is a significant volume of water and as shown above, results in a significant change to the size of the WHPA-Q1. We understand that the Water Services Canada gauge was not accurate at this time, however, a significant loss of water still occurs.

Neither the inability of the model to replicate this loss nor the supposition that the water follows a hyporheic pathway returning to the river somewhat downstream adequately addresses the issue. Paul Chin stated that the Eramosa River was modelled as a fixed head stream boundary and the March 4 letter stated that increasing the hydraulic conductivity beneath the river resulted in greater flow from groundwater to the river. In order for the river to lose water, the hydraulic head beneath the river must be less than the river stage (specified head). If the potentiometric surface of the Gasport Aquifer is elevated above the river stage in areas outside of the river valley, then the only explanation for river loss to the aquifer is if there the hydrostratigraphic units directly beneath the river have lower hydraulic potential than the river. The simulation does not appear to have achieved this.

From the County of Wellington's perspective, the observed loss in the Eramosa River is significant and should either be replicated by the model, or proven to return to the river

in a methodology as suggested by Dr. Whiteley. We also understand that the risk level assignment to Arkell Well No. 1 is sensitive to changes in the model in this area and therefore suggest that this issue be adequately addressed before the risk level is assigned.

## **2.2 Vinemount**

No further comment.

## **2.3 Cambridge Overlap**

No further comment.

## **2.4 Influence of Nestle Waters Canada taking**

Based on draft figures provided by Matrix Solutions to us on March 16, 2015, the simulated drawdown in the Gasport aquifer at County Road 34 without pumping by Nestle Waters Canada (but including City of Guelph wells, Guelph Limestone Quarry and other takers in Aberfoyle), is somewhat less than two metres. Therefore, even a small drawdown created by Nestle Waters Canada at County Road 34 will result in the WHPA-Q1 boundary moving significantly southward. According to recent well shut-in measurements, the impact of Nestle Waters Canada taking is at least 0.5 metres in the vicinity of County Road 34. Therefore, provided that the estimate of drawdown by the City of Guelph wells and other permit holders is reasonably predicted by the groundwater model, the inclusion of the Nestle Waters Canada area of influence in the Gasport aquifer is warranted.

## **2.5 Influence of Burke Well**

The influence of the Burke well on Gasport potentiometric surface is shown to be relatively small given that 95% of water in the Burke well is derived from the upper aquifers. Therefore, the aforementioned modelled drawdown of approximately two metres at County Road 34 (and Brock Road) results from combined influence of the Downey Road Well, University Well, Arkell Springs wells and other permit holders. These wells are at least six kilometers distant, are not in the same groundwater shed and yet are predicted to have significant influence on water levels near Aberfoyle. The influence of the City of Guelph wells at this distance is impossible to confirm with monitoring as there are no historical records of water levels in the Gasport aquifer in this area. In comparison, the Nestle Waters Canada well is located only 1.5 km downgradient and has an impact of approximately 0.5 metres which is reasonable.

It is our opinion that verification of drawdown by the City of Guelph wells near Aberfoyle remains to be a significant data gap as the predicted drawdown in the model by the City wells coupled with that of the predicted drawdown from water taking in the Aberfoyle area results in the significant enlargement of the WHPA-Q1. It is impossible to verify that historical drawdown has occurred, thereby confirming the model results. A recent review of data available from Well VPV-01<sup>1</sup> located at the Victoria Park Valley Golf Course completed with Westbay Casing in the Gasport Aquifer, shows a daily perturbation of less than five centimeters, presumably from a City well. There is daily recovery of drawdown. The Matrix Tier 3 model predicts a drawdown of between 3 and 5 metres in this area.

## **2.6 Meadows of Aberfoyle**

No further comment

## **2.7 Kraus Nurseries**

No further comment

## **2.8 Okashimo Fish Farm**

No further comment

## **2.9 Assignment of Significant Risk Level**

The significant risk designation is assigned because of the high uncertainty that Arkell 1 can meet the allocated rate. The other five municipal wells within one metre of the safe water level do not trigger the significant risk assignment and in fact the Matrix Tier 3 report mentions that uncertainty with respect to the majority of municipal wells is low. Therefore, the mentioning of the other five wells is not pertinent to the assigned risk level.

There are two other issues that have come out of discussions with the County of Wellington and were raised at the April 1, 2016 meeting. These are;

### ***1) Treatment of 20% Reduction of Water Taking During Level III Low Water Response Condition***

It was confirmed in Friday's meeting that the City of Guelph and all holders of PTTW's are required to reduce taking by 20% during a Level III Low Water Response condition.

---

<sup>1</sup> Installed by University of Guelph at the Victoria Park Valley Golf Course in 2011

It was also conveyed to us that this reduction was not taken into account in the drought scenario modelled. The question that arises is; it is likely that the drought scenario as used in the model would trigger a Level III Low Water Response Condition. Could the required reduction in taking by the City of Guelph be accommodated by reducing taking from Arkell 1 and thus avoid the significant risk level?

*2) The Reduction of Significant Water Taking*

All existing permits to take water were included in the model scenarios and projected to the year 2031. It is possible that a large water taker such as the Guelph Limestone quarry will cease to take water. Is it therefore reasonable to run a scenario without the large water taking and reassign the risk level and size and shape of the WHPA-Q1 in that event? Should this be done now or at the RMMEP stage?

In addition to these scenarios, has the City of Guelph considered optimizing other wells during the drought to avoid the 'significant' risk assignment? Excluding the five wells that are within one metre of their safe available drawdown, are there no other wells that can be pumped at greater rates or for longer periods to avoid the significant risk assignment?

The City of Guelph in their Water Supply Master Plan, undertook to concentrate conservation efforts and new water supplies within the City limits and only look at new wells in the surrounding Townships at a later stage of the master plan. Is it reasonable to expect that a similar undertaking will be made with respect to prospective RMMEP policies?

**2.10 Threats Ranking**

No further comment

**2.11 Water Quantity Risk Management Measures Evaluation Process List of Tasks**

No further comment

Sincerely,

A handwritten signature in black ink, appearing to read 'Stan Denhoed', followed by a long horizontal line.

Stan Denhoed, P.Eng., M.Sc.  
Senior Hydrogeologist





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March 9, 2016

Kyle Davis  
Wellington Source Water Protection  
Risk Management Office  
7444 Wellington Road 21  
Elora, ON N0B 1S0

**Re: City of Guelph and Guelph/Eramosa Township Water Quantity Risk Assessment (WQRA) and Risk Management Measures Evaluation Process (RMMEP)**

Dear Kyle:

On behalf of the Lake Erie Source Protection Region (LESPR), please find attached the draft agenda and technical documents package for the April 1, 2016 Technical Meeting of the RMMEP Steering Committee and Municipal Peer Review Team to review the responses prepared by Matrix Solutions Inc. (Matrix) as requested in your June 19, 2015 submission of municipal peer review comments from Guelph/Eramosa Township, the Township of Puslinch, the Town of Erin and the County of Wellington.

The attachments to this letter include:

- 1) Draft Agenda for the April 1, 2016 Technical Meeting
- 2) March 7, 2016 Matrix response to the Town of Erin Municipal Review Comments
- 3) March 4, 2016 Matrix response to the Township of Puslinch and Township of Guelph-Eramosa Municipal Review Comments
- 4) February 25, 2016 draft Terms of Reference and Work Plan for the City of Guelph and Guelph/Eramosa Township Water Quantity Risk Assessment and Risk Management Measures Evaluation Process

Over the past eight months, Matrix have engaged the consultants for the municipalities to ensure that information was delivered, questions were answered and clarifications were provided to complete the Guelph and Guelph/Eramosa Tier 3 WQRA (WQRA) to the best of everyone's knowledge. The attached responses have been prepared for Wellington Source Water Protection and their municipal partners to obtain agreement that the concerns raised on June 19, 2015 have been fully assessed by Matrix and that the information provided in the responses can be used to finalize the modelling and writing of the WQRA.

In keeping with the provincial guidance for water budget project peer review, once accepted, the municipal comments and consultant responses will form part of the City of Guelph & Guelph/Eramosa Township Tier 3 Water Budget and Water Quantity Risk Assessment Peer Review Summary Report. The Ministry of Natural Resources & Forestry (MNRF) requires the submission of a completed Peer Review Summary Report prior to their acceptance of completed Water Budget documents for use in Assessment Reports and Source Protection Plans.

It is our expectation that, going forward from the April 1, 2016 meeting, the Steering Committee will be in a position to accept the Matrix responses, allowing Matrix to proceed with the Risk Assessment Scenarios and the update of the WQRA. It is anticipated that Matrix will circulate a revised WQRA to the Steering Committee and Municipal Peer Review Team in late April or early May 2016 for review of the model updates and Risk Assessment results at a Municipal Peer Review meeting in May 2016. Once reviewed, Matrix would submit a Final WQRA for peer reviewer sign-off in late May or early June 2016 that would be sent to the MNRF for their acceptance.

With respect to timing, the April 1, 2016 meeting will also provide an opportunity for the Steering Committee to provide comments on the proposed Terms of Reference and Work Plan to complete the WQRA, undertake the RMMEP and integrate water quantity policies into an updated Grand River Assessment Report and Grand River Source Protection Plan by December 31, 2017. Due to the complexity of the stakeholder mix involved in these projects, initial target dates have passed and there are concerns that the final deadline may be difficult to meet. These concerns will be discussed, and it is expected that dates can be set at the meeting to complete the WQRA and commence the RMMEP.

If you have any questions about the draft agenda, the technical attachments or the expectations for completing the WQRA and RMMEP projects, please feel free to contact the undersigned at (519) 621-2761 x2298 or by e-mail at [jetienne@grandriver.ca](mailto:jetienne@grandriver.ca).

Sincerely,

A handwritten signature in blue ink, appearing to read 'James Etienne', followed by a stylized flourish.

James Etienne, P.Eng.  
Sr. Water Resource Engineer

Attach.

Cc: Mark Paoli – County of Wellington  
Ray Blackport – Blackport Hydrogeology Inc.  
Stan Denhoed – Harden Environmental Services Ltd.  
Jim Baxter, Dwight Smikle – R.J. Burnside & Associates Ltd.  
Martin Keller – Lake Erie Source Protection Region  
Dave Belanger, Peter Rider – City of Guelph  
Scott Bates, Lynne Milford – Ministry of Natural Resources & Forestry  
Kathryn Baker, Cynthia Doughty – Ministry of Environment & Climate Change  
Paul Chin, Patty Meyer – Matrix Solutions Inc.

## MEMORANDUM

**TO:** James Etienne and Martin Keller, Grand River Conservation Authority

**FROM:** Paul Chin, Matrix Solutions Inc.

**RE:** City of Guelph and Township of Guelph/Eramosa Tier Three Risk Assessment – Response to Town of Erin Municipal Review Comments

**DATE:** March 7, 2016

### 1 INTRODUCTION

The Lake Erie Source Protection Region (LESPR) is undertaking a Tier Three Water Budget and Water Quantity Risk Assessment (Tier Three Assessment) for the municipal drinking water supplies of the City of Guelph, the village of Rockwood (Rockwood) and the community of Hamilton Drive (Hamilton Drive). Matrix Solutions Inc. (Matrix) was retained to complete the Tier Three Assessment and a municipal review team has been retained by the County of Wellington (Wellington) to review all technical documents prepared as part of this study.

This memo offers responses to the comments provided by Blackport Hydrogeology Inc. (Blackport) on behalf of the Town of Erin as part of their review of the draft Risk Assessment report (Matrix 2014) and the Work Plan for the Risk Management Measures Evaluation Process (RMMEP).

### 2 COMMENTS AND DISCUSSION

#### 2.1 Water Quantity Risk Assessment

Matrix agrees with Blackport's general assessment of the draft Tier Three Assessment and the limited implications for the Town of Erin.

#### 2.2 Water Quantity Risk Management Measures Evaluation Process Work Plan

Blackport generally agrees with the proposed work plan and raises a few questions for clarification. Responses to these questions are organized according to the headings in Blackport's review.

##### 2.2.1 Task 1: Review of Identification of Drinking Water Quantity Threats

##### Blackport Comment 1

*"it is important that whomever is undertaking the RMMEP is familiar with the existing Tier 3 assessment..."*

### **Matrix Response 1**

The Tier Three Assessment and the RMMEP are being conducted by Matrix. Matrix will update, but not duplicate work completed for the Tier Three Assessment.

## **2.2.2 Task 2: Where Required, Identify Percentage Impacts and Rank the Tier 3 Local Area Significant Threats**

### **Blackport Comment 2a**

*"Have not some of the scenarios presented in Table 1 already been performed as part of the Tier 3 assessment (e.g. modelling pumping at the permitted rates)?"*

### **Matrix Response 2a**

Scenarios for the RMMEP will not duplicate the Tier Three Assessment scenarios, but will be variations to test the ability of Risk Management Measures to mitigate the water quantity risk (MOE 2009; TRCA 2013a). If updates to the water takings are required in Task 1, the Risk Assessment scenarios may be performed again to provide baselines for comparison with the Risk Management Measures scenarios (TRCA 2013a).

### **Blackport Comment 2b**

*"Realistic consumptive and non-consumptive use should be refined, where possible, for many of the scenarios in Table 1."*

### **Matrix Response 2b**

Matrix agrees with this comment. The consumptive use of water takings is accounted for in the Tier Three Assessment and will be incorporated into the RMMEP.

### **Blackport Comment 2c**

*"Is the use of the term "recharge" referring to recharge to the water supply aquifer (e.g. there is big difference between local recharge to an unconfined shallow aquifer and regional recharge to a deeper confined aquifer)?"*

### **Matrix Response 2c**

The use of the term "recharge" refers to water that moves from the ground surface, through the unsaturated zone and reaches the saturated zone. The Tier Three Assessment did not predetermine whether recharge reaching the saturated zone provided water to the shallow or deeper aquifers. The Risk Assessment scenarios incorporated reductions in recharge (i.e., water reaching the saturated zone) due to future land use changes to determine the impact to municipal water supplies (Matrix 2014).

## **2.2.3 Task 3: Select Preliminary Risk Management Measures (RMMs) and Evaluate the Risk Management Measures**

### **Blackport Comment 3**

*"It would appear that there are two components to this that should be explored together. The operational aspects are important, as purely from an operational risk perspective there may be*

*operational procedures to optimize the city-wide water system, while there may be Risk Management measures to aid in maintaining overall recharge to the aquifer system or decrease withdrawal from the aquifer system.”*

### **Matrix Response 3**

Matrix agrees with this comment. These two components will be explored together as operational aspects (e.g., System Optimization) are considered Risk Management Measures and are listed in the Water Quality and Quantity Risk Management Measures Catalogue (TRCA 2013b)

## **2.2.4 Task 4: Prepare a “Draft Threats Management Strategy” to discuss with Municipalities and Stakeholders**

### **Blackport Comment 4**

*“The key will be consultation throughout the previous tasks to ensure there is a reasonable consensus moving forward.”*

### **Matrix Response 4**

Matrix agrees with this comment. The RMMEP is designed with a high level of consultation with stakeholders (TRCA 2013a).

## **2.3 Conclusions: Implication for the Town of Erin, and Recommendation**

Matrix agrees with Blackport’s general assessment that there are limited implications for the Town of Erin and agrees with the single recommendation: *“If measures are recommended for the RMMEP that could potentially impact land use or land use activities in the Town of Erin the Town should be consulted to assess the need and the implications.”*

## **3 REFERENCES**

Ontario Ministry of the Environment (MOE) and Ministry of Natural Resources (MNR). 2009. *Water Quantity Threats Ranking Scenarios Guide*. Prepared for The Ontario Ministry of the Environment and The Ontario Ministry of Natural Resources. Breslau, Ontario. October 14, 2009. <http://waterbudget.ca/threatsrankingguide>

Matrix Solutions Inc. (Matrix). 2014. City of Guelph and Communities of Rockwood and Hamilton Drive Tier Three Water Budget and Local Area Risk Assessment. Report prepared for Lake Erie Source Protection Region. Draft. July 2014.

Toronto and Region Conservation (TRCA). 2013a. *Guide Water Quantity Risk Management Measures Evaluation Process*. Prepared for The use of Source Protection Committees in preparation of the Source Protection Plans under the Clean Water Act. Toronto, Ontario. January 2013.

Toronto and Region Conservation (TRCA). 2013b. *Water Quality and Quantity Risk Management Measures Catalogue*. Version: 6.0. April 5, 2013. Accessed November 1, 2013. <http://trcagauging.ca/RmmCatalogue/QuantityIndex.aspx>.



## MEMORANDUM

**TO:** James Etienne and Martin Keller, Grand River Conservation Authority

**FROM:** Paul Chin, Patty Meyer, and Jeff Melchin, Matrix Solutions Inc.

**RE:** City of Guelph and Township of Guelph/Eramosa Tier Three Risk Assessment – Response to Municipal Review Comments

**DATE:** March 4, 2016

## 1 INTRODUCTION

The Lake Erie Source Protection Region (LESPR) is undertaking a Tier Three Water Budget and Water Quantity Risk Assessment (Tier Three Assessment) for the municipal drinking water supplies of the City of Guelph, the village of Rockwood (Rockwood) and the community of Hamilton Drive (Hamilton Drive). Matrix Solutions Inc. (Matrix) was retained to complete the Tier Three Assessment and a municipal review team has been retained by the County of Wellington (Wellington) to review all technical documents prepared as part of this study.

This memo summarizes the comments provided by Harden Environmental Services Ltd. (Harden 2015; in Section 2) and R.J. Burnside and Associates Ltd. (Burnside 2015a; in Section 3) as part of their review of the draft Risk Assessment report (Matrix 2014), as well as responses to those comments by Matrix. Attachment A is provided at the end of this memo which summarizes the refinements made to the Tier Three groundwater model and the results of local calibration efforts based on newly provided data.

## 2 HARDEN – COMMENTS AND DISCUSSION

### 2.1 Harden Comment 1 (Eramosa River as a Groundwater Discharge Zone)

*One of the tasks of the Tier 3 Study is to develop and calibrate surface and groundwater models to assess water budget components in the study area. Harden Environmental has recently been involved in a streamflow study in the Eden Mills area and determined that a significant volume of water is lost from the Eramosa River to the Goat Island/ Gasport aquifer in the reach between Indian Trail Road and the confluence of the Eramosa River and Blue Springs Creek. Depending on streamflow, the loss ranges from 100 to 500 L/s. This information was not available at the time of writing the Tier 3 Study but may have significant implications to the size and shape of Well Head Protection Areas in Wellington County, protective measures needed for the City of Guelph water supply and the assignment of risk level.*

*Based on our review of the reporting in the Tier 3 Study and additional information provided by Matrix on March 16, 2015, we conclude that the groundwater model predicts that this reach of the Eramosa River is mainly a groundwater discharge zone (minor recharge occurring near the*

confluence of the Eramosa River and Blue Springs Creek) whereas our observations are that the Eramosa River is a significant losing stream (recharge zone) in this area.

#### 2.1.1 Harden - Suggested Resolution for Comment 1 and 2

*The City of Guelph water supply, specifically the Arkell Springs well field, is thus shown to be sensitive to changes to the Tier 3 Groundwater model in the Rockwood Area. Therefore, if the model is adjusted to;*

*a) account for the significant loss of water from the Eramosa River to the Gasport Aquifer (Eden Mills area), and*

*b) be refined to remove the Vinemount Aquitard from the area east of Rockwood*

*it may be that the "significant" risk level is removed.*

*Given the concern raised by the County of Wellington in regards to the 'significant risk level' assignment, it is our recommendation that model adjustments or sensitivity analysis that address these technical concerns be addressed before the 'significant' threat level is finally assigned to the Guelph Water Supply system.*

#### 2.1.2 Matrix Response 1

To address Harden Comment 1, Matrix reviewed the following reports and data:

- Arkell Adaptive Management Plan Annual Monitoring reports for 2011 to 2014 (Stantec 2012, 2013a, and 2015)
- Flowrate Data for Eramosa River compiled by Richard Lay, Millpond Conservation Association Inc. (2015)
- Monitoring Report to the MOECC from Harden Environmental re: Permit to Take Water 5410-8YQNXU (Eden Mills Millpond) dated March 28, 2014 with flow measurements and analyses for 2013 (Harden 2014).
- Eramosa River – Blue Springs Creek Watershed Study Hydrogeology Component, Report prepared for the Grand River Conservation Authority (Stantec 1999)

Based on the flow rate observations by the Millpond Conservation Association, the potential impact of increased hydraulic connection between the Eramosa River and the Middle Gasport production aquifer was explored in this area of the groundwater flow model through a sensitivity analysis that involved an additional model scenario. The sensitivity scenario included increasing the horizontal ( $K_h$ ) and vertical ( $K_v$ ) hydraulic conductivity of the bedrock beneath the Eramosa River to  $K_h = 8 \times 10^{-5}$  m/s ( $K_v = 8 \times 10^{-6}$  m/s), between Rockwood and Wellington Road 29. These values are representative of the middle Gasport Formation. The model used for the 2014 draft Risk Assessment scenarios simulated fractured bedrock ( $K_h = 3 \times 10^{-5}$  m/s;  $K_v = 3 \times 10^{-6}$  m/s) underlying the Eramosa River down to the upper Gasport Formation ( $K_h = 2 \times 10^{-6}$  m/s;  $K_v = 2 \times 10^{-7}$  m/s).



The set-up of the scenario simulated for this sensitivity analysis was the same used for calibration of the model for the Tier Three Assessment: a steady-state model simulating long-term average climate (1960 to 2005) and land use and water taking conditions that existed in 2008 (the Tier Three study year). Calibration of Tier Three Assessment groundwater model was to 2008 water levels, and baseflow conditions.

These changes led to a lowering of hydraulic heads in the Gasport Formation beneath the river by up to 4.5 m near Rockwood, and 1 to 2 m near Eden Mills; and slightly increased groundwater discharge along this reach of the river. Table 1 shows the impact of the hydraulic conductivity changes on baseflow at the locations used to calibrate the Tier Three Assessment model. Baseflow in the Eramosa River at Wellington 29 was simulated to increase by 6.4 L/s due to the stronger connection with the Gasport Formation aquifer, while upstream, at Rockwood, baseflow was simulated to decrease by 4 L/s, due to the lowering of hydraulic heads in the Gasport in this area from the loss of hydraulic support down gradient. At the Water Survey of Canada gauge (Eramosa River above Guelph) baseflow was simulated to increase by 6.6 L/s or about the same as at Wellington 29, so there was minimal net groundwater discharge (+ 0.2 L/s) between the two stations under this revised sensitivity scenario.

**Table 1 Impacts to Baseflow due to Changes in Bedrock Hydraulic Conductivity of the Eramosa River between Rockwood and Arkell**

Baseflow Calibration Location	Baseflow - Calibrated 2014 Model (L/s)	Change in Baseflow Due to Increased Hydraulic Conductivity (L/s)	% Change
Eramosa River at Rockwood	792	-4.0	-1%
Eramosa River at Wellington Rd 29	1,440	6.4	0%
WSC Eramosa River above Guelph	1,520	6.6	0%

Additional effort was expended to try to get the model to simulate the loss of water from the Eramosa River to the aquifer at this location including adjusting the stage of the river and adjusting the representation of the Eden Mill Pond dam. Efforts, including the above noted hydraulic conductivity changes, were unsuccessful in enhancing the recharge from the Eramosa River to the aquifer between Indian Train Road and just downstream of the confluence of the East Branch at Eden Mills. Although the recharge at this location could not be discretely represented, it is our opinion that on the whole, the water budget of the subwatershed (and the entire Tier Three Assessment model) is defensible. The net discharge and recharge from the Eramosa River is well represented as evidenced by the calibration to baseflow targets as described in the Model Calibration Report (Appendix B of the draft Risk Assessment Report; Matrix 2014).

*The Eramosa River – Blue Springs Creek Watershed Study* (Stantec 1999) demonstrated that under low flow conditions in 1995 and 1996 the reach between Rockwood and Watson Road was a net discharge area: “Water table contours indicate significant discharge locations at Eden Mills and the confluence of the Eramosa River and Blue Springs Creek and along the Eramosa River;” and “The deeper water levels show the extensive movement of water towards what would appear to be a regional discharge area from Eden Mills and the lower part of Blue Springs Creek to the confluence of Torrance Creek, west of Arkell”. These observations are also supported by recent data (Stantec 2012; 2013a; 2015) and match what the Tier Three Assessment model predicts: this reach of the Eramosa River is a regional discharge

area that gains 648 L/s between Rockwood and Wellington Road 29 (including the groundwater discharge to Blue Springs Creek).

Although the Eden Mills Millpond Association observations from recent years show that the Eramosa River is losing water seasonally somewhere upstream of Station 3 (Harden 2014), above the confluence with Blue Springs Creek, it is unclear where that water flows to and/or discharges. It could be that it discharges in the Eramosa River just downstream at the confluence with Blue Springs Creek, or in Blue Springs Creek east of the confluence with the Eramosa. This possibility precludes significant recharge of the deep bedrock aquifer occurring due to the observed streamflow losses at Eden Mills.

Historical field observations (Stantec 1999) show there are losing and gaining sections of the Eramosa River between Rockwood and the gauge at Watson Road. The Stantec (1999) report identifies the lower portion of the Eramosa River downstream of Eden Mills as a losing reach: "the portion of the Eramosa River downstream of Eden Mills loses about 100 L/s in baseflow".

It is difficult to determine where along the Eramosa River groundwater is discharging and where it is recharging the underlying groundwater flow system. The data suggests the nature of the recharge and discharge varies seasonally and annually. Until detailed flow profiling of the Eramosa River above the Watson gauge to Rockwood occurs, it will be unclear how to interpret the Eden Mills data and where net gains and loss are occurring (Hugh Whiteley, pers. comm.).

The objectives of the Tier Three Risk Assessment are to assess the long-term sustainability of the source water resource on a water budget basis. Calibration of the groundwater flow model was done using historical baseflow conditions as observed at the various stations and gauges identified in the draft Risk Assessment report (Matrix 2014). For this area of the Eramosa River, the groundwater flow model was calibrated to baseflow conditions for the stations shown in Table 1. This calibration was reviewed by the peer review committee and found to be acceptable for the purposes of the Tier Three study.

Based on the analysis above, we believe the model is representative of the groundwater flow system in this area and suitable for simulating and making predictions on the long-term sustainability of the water supplies in the Guelph and Rockwood areas. To simulate the seasonal and local-scale variations in groundwater discharge and recharge conditions beneath the river would require additional field work and model calibration that are beyond the scope of this project. For these reasons, changes made to the bedrock underlying the Eramosa River were not carried through to the 2016 model update described in Attachment A.

## **2.2 Harden Comment 2 (Vinemount Formation as an Aquitard)**

*The follow-on to the statement (page viii [of the Risk Assessment Report; Matrix 2014]) that the Vinemount Aquitard is already a limiting factor for recharging the Gasport Aquifer and therefore a reduction in recharge has a minimal impact on municipal water levels is that in the areas where the Vinemount is absent, there may be direct recharge from ground surface to the Gasport Aquifer. The accurate identification of the extent of the Vinemount therefore becomes important as greater recharge to the aquifer reduces the size of the WHPA-Q1. This is particularly true for areas east and north of the City of Guelph. As discussed in Section 2.3.1 [of Matrix 2014], a large area east of Rockwood is described as being underlain by the Reformatory [Quarry] and Vinemount Aquitard. Figure 1, attached, shows known locations where the*

*Vinemount aquitard is absent. These locations are; TW3 (Test well for Town of Rockwood), MW15 (test well for Hidden Quarry) and several outcrops mapped by Telford.*

### **2.2.1 Matrix Response 2**

Based on the interpreted absence of the confining Vinemount Member of the Eramosa Formation near and east of Rockwood, the bedrock units in the area between the Eramosa River and Blue Springs Creek was re-interpreted to be the Upper Gasport and Goat Island formations. The hydraulic conductivity of these layers in the groundwater flow model was updated to reflect that of the modelled Upper Gasport unit and a more fractured Goat Island Formation. The vertical hydraulic conductivity value was increased to  $2 \times 10^{-7}$  m/s from  $3 \text{ to } 8 \times 10^{-8}$  m/s. Additional hydrogeological information was provided by Harden for the area of Hidden Quarry (Harden 2012), located east of Rockwood. This information was also reviewed by Matrix and used to update the model. This update of the numerical model, along with other updates detailed herein, was incorporated into the transient calibration effort described in Attachment A.

## **2.3 Harden Comment 3 (Region of Waterloo and City of Guelph Overlap)**

*The Tier 3 Study only addresses the WHPA-Q1 for the City of Guelph and a two kilometer buffer with the watershed divide with the City of Cambridge portion of the Regional municipality of Waterloo Tier 3. We understand that the Cambridge portion of the RMOW Tier 3 is ranked as Low Risk, therefore, no policies need to be developed for the Township of Puslinch.*

### **2.3.1 Harden-Suggested Resolution for Comment 3**

*The assignment of a “low risk” to the RMOW Tier 3 results in no special policies being required for the Township of Puslinch or the County of Wellington. No additional comment necessary.*

*The RMOW Tier 3 includes a significant portion of the Township of Puslinch and issues with Permits to Take Water outlined in Comment 6 also need to be addressed by the Region’s Tier 3.*

### **2.3.2 Matrix Response 3**

We acknowledge this comment and refer the reviewers to the Region of Waterloo Tier Three Assessment study team for further discussion, as required.

## **2.4 Harden Comment 4a (Extent of WHPA-Q1 – PTTW 7043-74BL3K Nestlé Waters Canada)**

*Figure 6.8 of the CRA report (Test Pumping Investigation Supply Well TW3-80, December 2004) shows that after 72 hours of pumping at 700 igpm ( $4,576 \text{ m}^3/\text{day}$  vs  $2,396 \text{ m}^3/\text{day}$  in the Tier 3 model) the drawdown from the well was estimated to be one metre at a location 200 metres north of County Road 34. The 2014 Matrix Solutions Inc. report (Figure 5.1) indicates a drawdown of five metres approximately 650 metres north of County Road 34. Also, the 2004 CRA report shows a drawdown of less than one metre during the pumping test at Mclean Road whereas the Matrix Solutions Figure 5.1 suggests a drawdown of 3-5 metres extending well south of Highway 401.*

*The Matrix Solutions Inc. Tier 3 drawdown in the Aberfoyle South area arises mainly from the combined water taking by Mini Lakes, Mill Creek Campground, Meadows of Aberfoyle, Concast, Royal Canin and Nestlé Waters Canada. The consumptive rates of these takings are 129, 164, 18, 200, 105 and 2396 m<sup>3</sup>/day respectively. Nestlé Waters Canada accounts for 80% of this taking.*

*Matrix Solutions confirms that the model predicts that the Nestlé Waters Canada permitted water taking alone is having a significant influence on the size and shape of the WHPA-Q1 in the Aberfoyle area. An analysis shows that without the Nestlé Waters Canada taking, the WHPA-Q1 would shift some 4400 metres northward.*

#### **2.4.1 Harden-Suggested Resolution for Comment 4a**

*Verification of the model predicted drawdown in the Aberfoyle area and southwards is difficult, however there are several studies available that may assist in confirming the predicted drawdown. These are;*

- *Recent well installations by Nestlé Waters Canada*
- *Groundwater monitoring by Royal Canin*
- *Groundwater monitoring by Meadows of Aberfoyle*
- *Gilmour Road site analysis by Nestlé Waters Canada*

*We recommend that these sources of information be reviewed for confirmation into the predicted and present drawdown from Nestlé Waters Canada. We recommend that this be undertaken prior to finalization of the Tier 3 Study.*

#### **2.4.2 Matrix Response 4a**

Matrix requested, received and reviewed the following reports pertaining to sites in the vicinity of Nestlé Waters Canada (Nestlé) and Royal Canin:

- Nestlé Waters Canada, Test Pumping Investigation, Supply Well TW3-80 (CRA 2004)
- Nestlé Waters Canada, 2010 Annual Monitoring Report (CRA 2011)
- Nestlé Waters Canada, Test Pumping Investigation for TW2-11 (CRA 2012)
- Meadows of Aberfoyle – 2014 Annual Monitoring Report, Permit to Take Water No. 5626-7WLQ3W - Banks Groundwater Engineering Ltd. (Banks 2015)
- Royal Canin Canada, Hydrogeological Assessment and Pumping Test, Highway 401 and County Road 46, Puslinch, Ontario – SNC Lavalin Engineers and Constructors Inc. (SNC Lavalin 2005)

Estimates of hydraulic conductivity documented in these reports based on hydraulic test interpretations were compared to modelled values. Key borehole logs and information regarding high yield bedrock zones provided in these reports were reviewed to ensure the simulated wells in the model were extracting water from the correct modelled hydrostratigraphic units.

With the availability of pumping test data from Nestlé (CRA 2011), refinements were made to the groundwater flow model and local-scale calibration of the area was conducted to ensure adequate local,

well-field scale response to pumping. Details of this effort are found in Attachment A. The results of the local-scale calibration show that the model reasonably approximates drawdown experienced during pumping tests in this area and that the model is suitable for the Tier Three Assessment.

## **2.5 Harden Comment 4b (Extent of WHPA-Q1 – Model Predicted Drawdown in City of Guelph Wells)**

*In order for the WHPA-Q1 to extend south of Maltby Road, the combined drawdown of the Downey well, Burke well and Puslinch takings must be greater than two metres in the Gasport aquifer. None of the individual 25 year capture zones of the Burke or Downey Road wells extend to Maltby Road. We have not been able to find individual drawdown contours for the Burke Well or Downey Road Well, it is thus not possible to estimate drawdown from these individual wells. For example, the 2013 Stantec Environmental Assessment for the Burke Well has a hydrograph with pumping elevations within the Burke Well at approximately 317 m AMSL. The 2006 Guelph Puslinch Groundwater Protection Study (Golder Associates) has a model-projected pumping elevation for the Burke Well at approximately 313 m AMSL. The 2014 Matrix Solutions report suggests a pumping elevation of 325 m AMSL in the Burke well.*

*The draft response provided by Matrix Solutions addresses this issue by confirming that the 3-D model does under-estimate drawdown at the Burke Well by approximately 4.5 metres. However, the model reasonably predicts transient fluctuations in the well brought on by pumping changes and recharge changes. Matrix Solutions also confirms that the majority of water from the Burke Well is sourced from the Guelph Formation, not the Gasport Formation and thereby may have little influence on the potentiometric level in the Gasport Formation.*

### **2.5.1 Harden-Suggested Resolution for Comment 4b**

*Review the model predicted drawdown in the Gasport Formation from the Burke Well and comment on the significance of under-predicting drawdown in regards to the size and shape of the WHPA-Q1. We recommend that this be undertaken prior to finalization of the Tier 3 Study.*

### **2.5.2 Matrix Response 4b**

We reviewed the following reports in response to Harden Comment 4b:

- Burke Water Station Class Environmental Assessment - Final (Stantec 2013b)
- Final Report on the Guelph Waterworks Groundwater Monitoring System (Golder 2009)
- Guelph-Puslinch Groundwater Protection Study (Golder 2006)
- Burke Well Site testing by Lotowater (1998)

The Tier Three Assessment model simulated the water level in the Burke Well to be 324.2 m above sea level (asl) under the steady-state simulation (Scenario C; 2008 pumping conditions, long-term average climate) with the Burke Well pumping at 5,385 m<sup>3</sup>/d (62 L/s). This is 5 m higher than the average 2008 observed water level at the Burke Well of 319.2 m asl, and 4 m higher than the range of observed water levels in 2008 (317.9 to 320.4 m asl; Figure 2-4 of the Burke Environmental Assessment; Stantec 2013b).

The final report on the Guelph Groundwater Monitoring System (MW06 series; Golder 2009) has an observed water level for the Burke Well of 325.5 m asl (Figure 5; Golder 2009) but it is unclear what date this data represents. This observed data is closer to the model simulated water level for the Burke well (324.2 m asl).

The Burke observation well is located 10 m from the pumping well, and the model-simulated water level was also 324.2 m asl while the average observed level in 2008 was 327.3 m asl. The lowest water level elevation in the observation well was 325 m asl in 2008. At MW06-09 A, located about 1 km to the south east, the model-predicted water level in the Gasport Formation was 326 m asl while the observed ranged from 327 to 329.5 m in 2008. Thus the simulated water level in the Gasport Formation in this area was only 1 m less than the seasonal low of that year. Thus the model was judged as reasonably calibrated in the area south of the Burke Well.

As mentioned by Harden (2015), the Guelph-Puslinch Protection Study (Golder 2006) shows the simulated head in the Amabel around the Burke Well at about 310 m asl, but the observed head in the Amabel was approximately 330 m asl. Thus the Guelph-Puslinch model severely under predicted the aquifer heads by 20 m and was not considered well-calibrated in this area.

The testing of the Burke Well by Lotowater in 1998 shows that 95% of flow comes from the Guelph Formation and the rest from the Eramosa and Gasport Formations. Thus, the significance of pumping from the Burke Well on drawdown in the Gasport is interpreted to be limited.

The Model Calibration Report (Appendix B of the draft Risk Assessment Report; Matrix 2014), Section 3.4.2.1, discusses the differences between the observed head and model-calibrated head at the municipal wells. In summary, calibration of the Tier Three Assessment model focused on matching the transient response to stresses (pumping and climate) at the municipal wells. The calibration results for the Burke well are discussed specifically and shown on Fig. 3-8c of Appendix B. As there was excellent agreement between the pattern of observed and model-simulated water levels over a 9-year verification exercise, the calibration of the Tier Three Assessment model for the Burke Well and the surrounding area was assessed as defensible by the project team.

Given the above review, we believe that the model is well-calibrated for the purposes of the Tier Three Assessment and the estimation of the size and shape of the WHPA-Q1.

## **2.6 Harden Comment 4c (Extent of WHPA-Q1 – PTTW 8228-76XLE Meadows of Aberfoyle)**

*The current (since 2009) PTTW is 5626-7WLQ3W.*

### **2.6.1 Harden-Suggested Resolution for Comment 4c**

*None required.*

### **2.6.2 Matrix Response 4c**

The permit number will be updated in the final report.



## **2.7 Harden Comment 4d (Extent of WHPA-Q1 – PTTW 02P-2064 Kraus Nurseries Ltd.)**

*Kraus Nurseries have holdings in Waterdown, Ontario and Mrs. Kraus confirmed that 02P-2064 is an old permit of hers but she does not own property in Puslinch, the permit is for her property in Waterdown. In addition, this is an expired permit.*

### **2.7.1 Harden-Suggested Resolution for Comment 4d**

*Remove permit from Tier 3 Groundwater model and revise area of WHPA-Q1. We recommend that this be undertaken prior to finalization of the Tier 3 Study.*

### **2.7.2 Matrix Response 4d**

This permit will be removed from the groundwater flow model used to conduct the updated Risk Assessment. The WHPA-Q1 will be updated following finalization of refinements to the model based on the municipal review comments presented in this memo.

## **2.8 Harden Comment 4e (Extent of WHPA-Q1 – PTTW 99P-2132 Kats Okashimo Fish Farm)**

*There is no evidence that water has ever been taken through PTTW 99P-2132. The PTTW was not renewed in 2009. A site visit to the Kats Okashimo Fish Farm failed to find a fish farm at the location (now a Tarot Card reader) and the present tenant confirmed that fish farming has not been done for at least twelve years (nor is he aware if it ever occurred). As seen on Figure 5.1, the modeled water taking at the Kats Okashimo Fish Farm has a significant effect on drawdown beneath Puslinch Township. The effect, of removing this taking, on the size and shape of the WHPA-Q1 must be evaluated.*

### **2.8.1 Harden-Suggested Resolution for Comment 4e**

*Remove permit from Tier 3 Groundwater model and revise area of WHPA-Q1. We recommend that this be undertaken prior to finalization of the Tier 3 Study.*

### **2.8.2 Matrix Response 4e**

This permit will be removed from the groundwater flow model used to conduct the updated Risk Assessment. The WHPA-Q1 will be updated following finalization of refinements to the model based on the municipal review comments presented in this memo.

## **2.9 Harden Comment 5 (Significant Risk Assignment to WHPA-Q1)**

*The combined WHPA-Q1 as shown on Figure 5.1 for all of the City of Guelph wells has been assigned a Significant Risk level. The significant risk level is assigned as a result of the high uncertainty that Arkell Well 1 can meet its allocated rate (page 133). The high uncertainty caused the assigned moderate Risk level to be elevated to Significant Risk level. The policy implications of this to the Township of Puslinch is that all existing water taking and future water takings become Significant Threats to the City of Guelph municipal wells. Therefore, permits to*

*take water such as those issued to Nestlé Waters Canada, ConCast, Mini Lakes, Royal Canin, Mill Creek Campground and all aggregate washing will be subject to any policies for Significant Threats developed under the Clean Water Act.*

*Arkell Well 1 obtains water from the overburden aquifer and a water quantity risk to the overburden aquifer does not necessarily represent a threat to wells completed in the Gasport Aquifer. Similarly, water taking from the Gasport Aquifer near Aberfoyle will not affect the safe drawdown of Arkell Well 1. This would allow for a moderate risk level for the remainder of the WHPA-Q1 and thus only future water taking will be subject to the new policies.*

#### **2.9.1 Harden-Suggested Resolution for Comment 5**

*It is understood that only one risk assignment is made for a well field. Since Arkell Well 1 has a significant risk level, the entire well field has a significant risk level. It is therefore important to consider all factors prior to the significant risk level assignment and adds further emphasis to Concerns 1 and 2.*

*It was discussed that 'gradational' policies would be considered based on a risk assessment after the RMMEP project is completed.*

#### **2.9.2 Matrix Response 5**

Comment acknowledged. The draft Risk Assessment found that five municipal wells within the City of Guelph had drawdown that came within 1 m of safe water levels during the drought scenarios. These results suggest the assignment of an elevated water quantity risk level is warranted for the City of Guelph water supplies. The Risk Management Measures Evaluation Process (RMMEP) will determine the degree of influence of each threat on each municipal well. Source Protection Plans are able to incorporate water quantity policies that account for the influence and proximity of current and future threats to municipal wells.

#### **2.10 Harden Comment 6 (Threats Ranking)**

*Any threats ranking of the Industrial threats identified in Puslinch Township on Figure 6.1 should consider the following;*

*The vast volume of water stored in the pit ponds near Aberfoyle are not considered in the model. There is an estimated 12,000,000 m<sup>3</sup> of water stored in pit ponds south of Highway 401, let alone those north of Highway 401. This is several times greater than that stored in Puslinch Lake. The volume of water that is stored in gravel pits in Puslinch Township is several times greater than in the former sand and gravel aquifer. Therefore, permitted water taking from the ponds should be carefully evaluated before deeming them a significant threat to the City of Guelph water supply.*

#### **2.10.1 Harden-Suggested Resolution for Comment 6**

*This can be addressed through a sector by sector analysis of Permits in the Risk Management Measures Evaluation Process.*



### 2.10.2 Matrix Response 6

These permitted surface water takings will be examined, as will all permitted takings within the WHPA-Q1, during the threats ranking portion of the RMMEP.

### 2.11 Harden Comment 7 (Water Quantity Risk Management Measures Evaluation Process List of Tasks)

*We have reviewed the list of tasks and do not have any comment other than given above.*

#### 2.11.1 Matrix Response 7

Comment acknowledged.

## 3 BURNSIDE – COMMENTS AND DISCUSSION

### 3.1 Burnside Comment 1 (Surface Water Leakage into the Bedrock Aquifer)

*Discussions that have been taking place as part of the review process have included Mr. Stan Denhoed representing the Township of Puslinch. Data available to Mr. Denhoed indicates that leakage to the aquifer from the Eramosa River in the vicinity of Eden Mills is orders of magnitude greater than that used in the model. Based on the noted sensitivity of the model to changes in other areas of the model and the proximity of this area to the City of Guelph, it is recommended that this update be undertaken to ensure that adequate representation of this documented interaction is included in the model. Leakage from the Eramosa River to the aquifer will likely add a significant volume of water to the aquifer thereby increasing aquifer recharge. This modification of several orders of magnitude of recharge will undoubtedly add volume to the aquifer and provide additional water to meet the current and planned demands.*

#### 3.1.1 Matrix Response 1

The observation of a loss of water from the Eramosa River was also identified by Harden (2015). See Section 2.1.2 above for Matrix's response to this technical issue.

### 3.2 Burnside Comment 2 (Expression of the Bedrock Valley on east side of Guelph)

*Our review of the mapping of this feature indicates that there are undulations in the extent of the valley that seem to match the road network around which the data was developed. The undulations include areas where the valley is narrower and these constrictions likely act as restrictions on groundwater flow through the valley. Restrictions on groundwater flow will likely impact the amount of groundwater available in areas downstream (downgradient) of the restrictions. It is recommended that the interpolation for the extent of the bedrock valley be revisited to ensure that restrictions on extent are not being artificially introduced through the nature of the data itself.*

### 3.2.1 Matrix Response 2

We reviewed the data and interpolation routine used to develop the bedrock surface for the model. The sparseness of data between the roads and the interpolation routine (Natural Neighbour) leads to the width of the bedrock valley north of Rockwood to potentially be overestimated in areas between the roads rather than underestimated (as presumed by the reviewers). The width of the interpreted valley is more accurate where there is a higher density of data (i.e., from domestic wells located along the roads). The addition of control points between high quality picks of the depth of bedrock along the interpreted thalweg serves to increase the continuity of the valley, and has a tendency to deepen the valley. If we were to use the available data without control points, the result would be a more irregular and less continuous bedrock valley that would underestimate the ability of the bedrock valley to transmit water.

The borehole logs intercepting the bedrock valley north of Rockwood were reviewed during the preparation for the 2014 draft Risk Assessment. At that time, the modelled hydraulic conductivity value representing the valley infill was increased from  $1 \times 10^{-8}$  m/s (representative of Port Stanley Till) to  $3 \times 10^{-5}$  m/s, representative of coarser grained sandy sediment. This change was included in the 2014 Tier Three Assessment model and led to an increase in the ability of the bedrock valley to transmit water.

Based on the above, we are confident that restrictions on the extent of the bedrock valley and its ability to transmit water have not been artificially introduced through our interpretation of the data.

### 3.3 Burnside Comment 3 (Eramosa Formation Aquitard)

*We note that drilling at the TW2-02 site in Rockwood did encounter a dark brown limestone layer that was less than 10 m thick at the top of the bedrock. The layer was not petroliferous and as a result we have interpreted that the Vinemount member of the Eramosa Formation is not present at this location. The modelling team may wish to review the interpreted and modelled presence of the low hydraulic conductivity Eramosa Formation which has been extended to a considerable distance east of Rockwood in the report based on well logs that reported dark brown limestone.*

*Considering the fact the Eramosa Formation is interpreted to be an aquitard which impedes vertical groundwater flow in the carbonate aquifer, it may be inappropriate to extend this low hydraulic conductivity layer to the area of Rockwood. The Eramosa Formation in this area is interpreted to subcrop beneath the relatively thin and permeable overburden and outcrop in the Eramosa River valley where karst topography is documented. Testing that we have undertaken at Rockwood Well 4 as part of a process to obtain a PTTW indicates that the dark brown limestone bedrock identified as Eramosa Formation is significantly weathered, produces significant water and does not act as an aquitard. Our testing has indicated that pumping within the deep bedrock results in surficial responses, which are not expected within an aquitard. Based on our test results we believe that the area where the Eramosa formation is present at the bedrock surface should be given a higher hydraulic conductivity due to its weathered condition.*

#### 3.3.1 Matrix Response 3

The interpreted absence of the Vinemount Aquitard in the area east of Rockwood was also identified by Harden (2015). See Section 2.2 above for Matrix's response to this technical issue.

### 3.4 Burnside Comment 4 (Existing plus Committed Demands and Allocated Rates)

*The allocated pumping rates used in the groundwater model for each well in Guelph/Eramosa are identified in Section 3.2.4 of the report. Guelph/Eramosa would like revised allocation rates based on an update to growth predictions since the 2011 Watson report. The updated demands were provided to Matrix at the meeting on March 13, 2015.*

#### 3.4.1 Matrix Response 4

Matrix has received the revised Allocated Rates for the Town of Rockwood (i.e., 2026 average day flow of 1,907 m<sup>3</sup>/day) and will use these estimates for the revised Risk Assessment.

### 3.5 Burnside Comment 5 (Safe Additional Available Drawdown)

*Burnside has previously provided comment on the Safe Additional Available Drawdown (SAAD) calculations in the draft report. Based on the technical rules the SAAD is the difference between the average pumping water level and 1 m above the pump intake. In most water systems the average pumping water level is determined using electronically collected water level data. Whereas water levels used to calculate the water levels in the Guelph/Eramosa wells are based on once a day manual water levels. In the case of the Cross Creek Well there are only three pumping water levels measured during a year of operation because the well only runs for approximately six hours every second day. It is our opinion that this data does not provide an adequate basis on which to compute an average water level.*

*The lack of suitable pumping water level information prevents the proper calculation of an average pumping water level. As a result, an automatic water level recorder (AWLR) was recently installed in the Cross Creek Well. In lieu of this data, we have reviewed the water level data and estimated acceptable average water levels and safe additional available drawdown values for each well as outlined below in Table 1.*

**Table 1: Recommended Safe Additional Available Drawdown for Guelph/Eramosa Wells**

	Grade Elevation (m amsl)	(2) Pump Intake (m amsl)	Pump Intake (m bgs)	Top of Casing (m agl)	(1) Operating Low WL (m amsl)	Report Average Pumping Water Level (m masl)	Report SAAD (m amsl)	Guelph/Eramosa SAAD (m amsl)
Cross Creek Well	351.3	302.7	48.6	0.8	317	320.2	16.6	13.3
Huntington Well	338.1	302.6	35.5	0.5	314	321.6	17.6	10.4
Rockwood Well 1	361	328.3	32.7	0.5	344	348.5	23	14.7
Rockwood Well 2	361	329.6	31.4	0.5	345	350.6	27	14.4
Rockwood Well 3	360.4	321.3	39.1	0.8	331	333.9	16.2	8.7
Rockwood Well 4	367	320	47	0.8	327	-	-	6.0
Guelph/Eramosa SAAD calculated (1) - (2) - 1 m; Well 4 estimated based on pumping test data.								

### 3.5.1 Matrix Response 5

The safe additional available drawdown for all Hamilton Drive and Rockwood municipal wells will be updated and used for the Risk Assessment based on the information summarized in Table 1 as provided by Burnside (2015a).

### 3.6 Burnside Comment 6 (Rockwood Well 4)

*A test well called TW2-02 was constructed as part of the Rockwood Water Supply Environmental Assessment (EA) in 2002. The water supply EA was completed in 2002 and the preferred solution was the phased addition of two new wells on the south side of Rockwood. Rockwood Well 3 was added in 2005. The TW2-02 site was identified as the other future municipal well site for Rockwood Well 4 with a capacity of 683 L/min. This site has been included in all of the previous models leading up to the present Tier 3 study. The site will be permitted as Rockwood Well 4 in 2015 and has not been included in this study.*

*Rockwood Well 4 was constructed 20 m from the TW2-02 site in December 2014. The new well was tested in January 2015 and has a capacity of approximately 910 L/min. A permit was applied for in May 2015. The pump house for the site will likely be constructed allowing connection of the well to the Rockwood system in 2016. The current version of the Tier 3 study should include Rockwood Well 4 at its proposed pumping rate of 910 L/min. This issue has been reviewed by the project team and we understand that the report will be revised to include Rockwood Well 4.*

*It is expected that the water demand will rotate between Rockwood Wells 1 and 2 (1,365 L/min), Rockwood Well 3 (910 L/min) and Rockwood Well 4 (910 L/min). We therefore recommend a distribution of the committed rate of 40% for Rockwood wells 1 and 2 combined and 30% each for Rockwood Wells 3 and 4. This change as well as likely changes related to future demands will likely require changes to the model.*

#### 3.6.1 Matrix Response 6

Rockwood Well 4 will be included in the groundwater flow model applied to simulate the Risk Assessment scenarios and appropriate details will be added to the relevant text, tables and figures of the Risk Assessment report and its appendices. The suggested distribution of the Committed increase in demand amongst the four municipal wells will be documented in the Risk Assessment report and will be applied in the Risk Assessment scenarios.

The groundwater flow model was refined around Rockwood Well 4 and a transient calibration was conducted for the area surrounding Well 4 using the details of a 72-hour constant rate pumping test summarized by Burnside (2015b). Details of this calibration are provided in Attachment A.

### 3.7 Burnside Comment 7 (Report Name)

*The name of the report does not properly identify the Township of Guelph/Eramosa as a primary stakeholder in this study. Based on recent meeting we have been advised that the report name is to be modified.*

### 3.7.1 Matrix Response 7

The report name will be updated to identify the Township of Guelph/Eramosa as having a municipal system being assessed under the Tier Three framework. Any appropriate text will also be updated.

## 4 REFERENCES

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- Stantec Consulting Ltd. (Stantec). 1999. Eramosa River – Blue Springs Creek, Watershed Study, Hydrogeology Component. The Grand River Conservation Authority. June 1999.



## ATTACHMENT A

### NUMERICAL MODEL UPDATES AND LOCAL CALIBRATION

#### 1 INTRODUCTION

The municipal review team identified two areas within the Guelph/Guelph-Eramosa Tier Three Assessment groundwater model domain where new data made available might help to refine the previous interpretations and improve the model. As a result, local-scale calibration efforts were undertaken to refine hydrogeologic parameters in these areas. Focus was given to the areas surrounding two municipal wells (i.e., Rockwood Well 3 and 4) including the Hidden Quarry site east of Rockwood, and the area near the Nestlé Waters Canada site in Aberfoyle. This attachment summarizes the specific concerns identified by the municipal review team and documents the efforts carried out by Matrix to address those concerns.

#### 2 NUMERICAL MODEL UPDATES NEAR ROCKWOOD

##### 2.1 Concerns Identified by Municipal Review

Municipal reviewers have identified the following concerns related to the application of the numerical model near the Town of Rockwood:

- 1) Reviewers identified that Rockwood Well 4 should be included in the Tier Three Assessment (Section 3.6 above). The well was constructed in December 2014, tested in January 2015, and a permit to take water was applied for in May 2015. It is expected that the well will be connected to the Rockwood water supply system in 2016 (Burnside 2015a).
- 2) Reviewers suggested that the Tier Three Assessment may be overestimating the extent of the Vinemount aquitard in the area east of Rockwood and towards the Hidden Quarry site (Sections **Error! Reference source not found.** and **Error! Reference source not found.** above). Borehole logs from TW3 (test well for the Town of Rockwood), MW15 (test well for Hidden Quarry) and several outcrops mapped by Telford suggest that the Vinemont aquitard is absent.

##### 2.2 Matrix Response

With the identification of Rockwood Well 4 as a water supply source to be considered in the Tier Three Assessment, and the interpretation that the Vinemount aquitard is absent in the area, refinements were made to the groundwater flow model to ensure representative local, well field-scale response to pumping. These refinements included:

- Addition of a boundary condition to represent Rockwood Well 4 as a pumping well
- Refinement of the finite element mesh surrounding Rockwood Well 4 and Bernardi Well 3 to capture the steep hydraulic gradients induced by pumping

- Changing the bedrock units between the Eramosa River and Blue Springs Creek in the area of Rockwood and Hidden Quarry to have the Upper Gasport (vertical hydraulic conductivity,  $K_v = 2 \times 10^{-7}$  m/s) as the upper-most bedrock unit. Previously,  $K_v$  ranged from  $3$  to  $8 \times 10^{-8}$  m/s

Data and documents reviewed as part of this model update process included:

- The original characterization data for the Tier Three project including picks of the Vinemount Member and Eramosa Formation, and picks of “black rock” in water well and other logs
- Results of the 2008, 2009 and 2010 Ontario Geological Survey (OGS) drilling programs in the Orangeville–Fergus area of southwestern Ontario (Burt and Webb 2013)
- Town of Rockwood – Town of Guelph/Eramosa, New Rockwood Well 4 Category 3 PTTW Application (Burnside 2015b)
- Rockwood Environmental Assessment, Hydrogeologic Report, Construction and Testing of TW3/02, Proposed Rockwood Well 3, Township of Guelph/Eramosa (Burnside 2002)
- Level I and II Hydrogeological Investigation, Hidden Quarry, Rockwood, Ontario (Harden 2012)

Matrix conducted local-scale transient calibration at Rockwood Well 4 and Bernardi Well 3 to ensure the simulated response at these wells was appropriate following the revised hydrostratigraphic representation. This calibration effort is discussed in the following sections.

### 2.2.1 Calibration to Rockwood Well 4 Constant Rate Pumping Test

Water level response data from a constant rate test conducted on Rockwood Well 4 in early 2015 (Burnside 2015b) was used to refine the calibration of the model in this area. The test took place over a period of 72 hours at a rate of  $1,244 \text{ m}^3/\text{day}$  (Burnside 2015b). Twenty-six wells were monitored during the test and the observed drawdown from these wells were used as calibration targets. Special attention was given to calibrating drawdown in the immediate vicinity of Rockwood Well 4 (i.e., OW2D/I/S located 20 m northeast of Well 4), as well as drawdown at wells near the Hidden Quarry site (i.e., M2, M15I/II/III located approximately 1.1 km east of Well 4). The simulated results for other wells monitored during the pumping test were examined to ensure the model was not overestimating drawdown, but these results are not reported here for brevity.

Hydraulic conductivity values were refined during model calibration, and the values assigned were guided by the interpreted range of conductivity and transmissivity values for those hydrogeologic units as presented in Golder Associates (2011), Burnside (2015b; 2002) and Harden (2012). The final range of hydraulic conductivity values applied to each refined area during model calibration is presented in Table A1 along with those values derived from previous studies.



**Table A1 Summary of Bedrock Hydraulic Conductivity Values near Rockwood**

Unit	Hydraulic Conductivity from Previous Studies (m/s) <sup>1</sup>		Area in Numerical Model	Simulated Hydraulic Conductivity (m/s)	
	Min	Max		Min	Max
Middle Gasport	$2 \times 10^{-6}$	$1 \times 10^{-2}$	Rockwood Well 4	$3 \times 10^{-5}$	$4 \times 10^{-4}$
			Bernardi Well 3	$3 \times 10^{-6}$	$4 \times 10^{-4}$

<sup>1</sup> Golder Associates 2011, Burnside 2015b; 2002, and Harden 2012

The observed and simulated drawdown and recovery curves for seven monitoring wells and Rockwood Well 4 are presented in Figures 1 through 8. We achieved an excellent fit to the observed data at Rockwood Well 4 (Figure 1). The remaining wells show a good match between observed and simulated data, especially for monitoring wells located within the same bedrock units (Figure 2 and 3) and monitoring wells located at Hidden Quarry (Figures 5 through 8).

The discrepancy between simulated and observed drawdown occurring at monitoring well OW2I (Figure 4) and OW2S (Figure 5) where the model predicted 1 to 1.5 m less drawdown than observed may be due to the model slightly underestimating the interconnection between the deeper aquifer and shallow monitoring zones. Given the complex nature of the fractured rock environment, this level of calibration is considered acceptable.

These results suggest that the updated model appropriately represents Rockwood Well 4 and is suitable to assess drawdown due to increased pumping in the Risk Assessment.

A portion of the drawdown observed in Rockwood Well 4 is caused by non-linear well losses due to well inefficiencies. The groundwater model does not explicitly simulate non-linear well losses within the well itself and thus the amount of drawdown due to non-linear well losses has been added to the simulated drawdown. This permits simulated and observed drawdown to be compared. Non-linear well losses were estimated for Well 4 using step test data (Burnside 2015b) and using the calculation method summarized in Appendix E of the draft Risk Assessment Report (Matrix 2014).

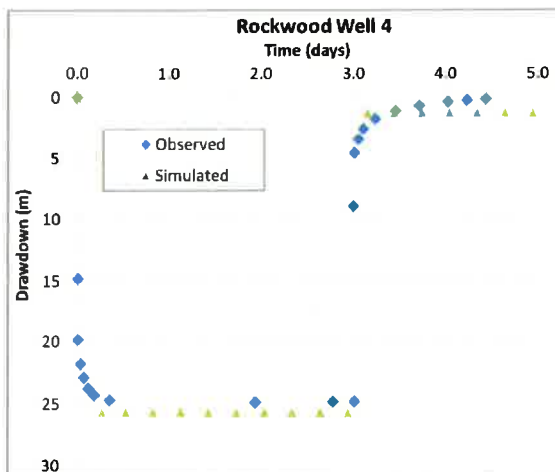


Figure 1. Simulated Drawdown Response at Rockwood Well 4

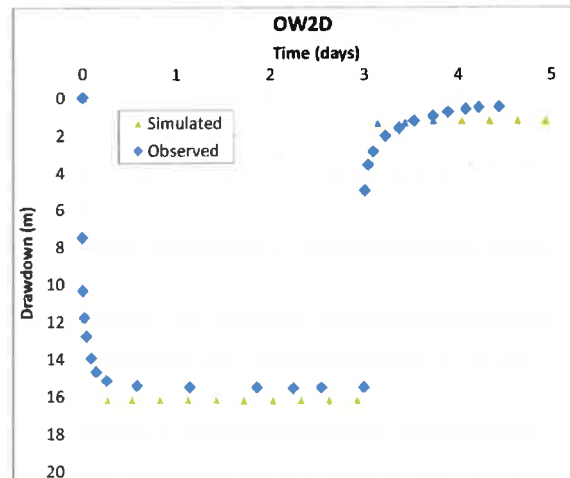


Figure 2. Simulated Drawdown Response at OW2D, 20 m from Rockwood Well 4

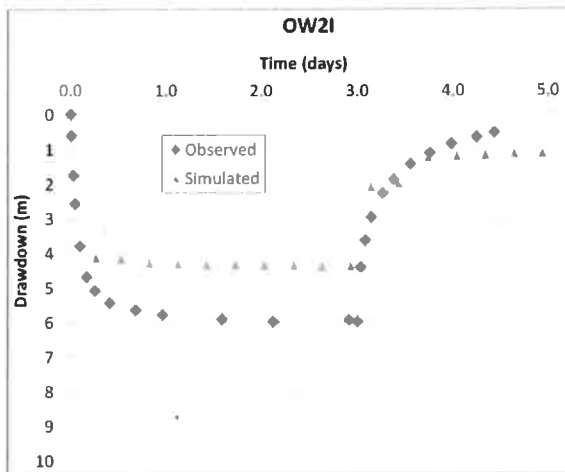


Figure 3. Simulated Drawdown Response at OW2I, 20 m from Rockwood Well 4

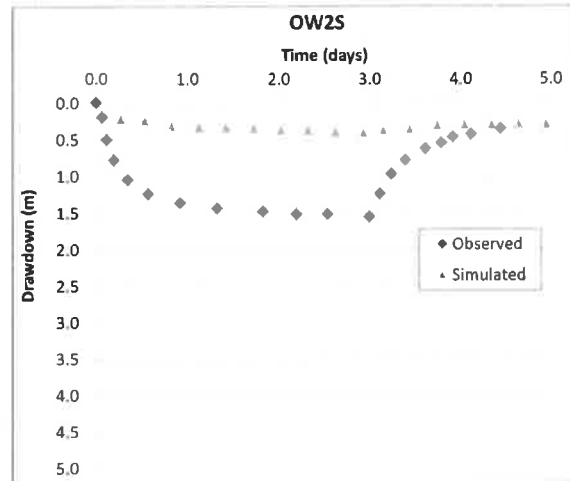


Figure 4. Simulated Drawdown Response at OW2S, 20 m from Rockwood Well 4

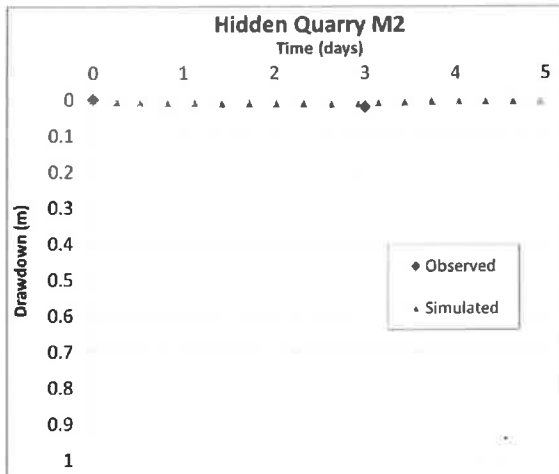


Figure 5. Simulated Drawdown Response at Hidden Quarry - M2, 1.2 km from Rockwood Well 4

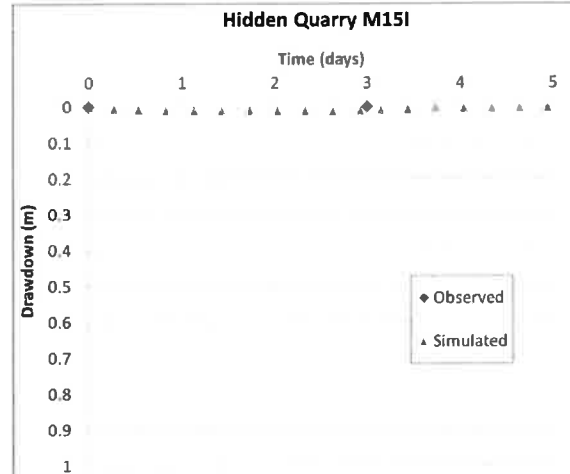


Figure 6. Simulated Drawdown Response at Hidden Quarry - M15I, 1.3 km from Rockwood Well 4

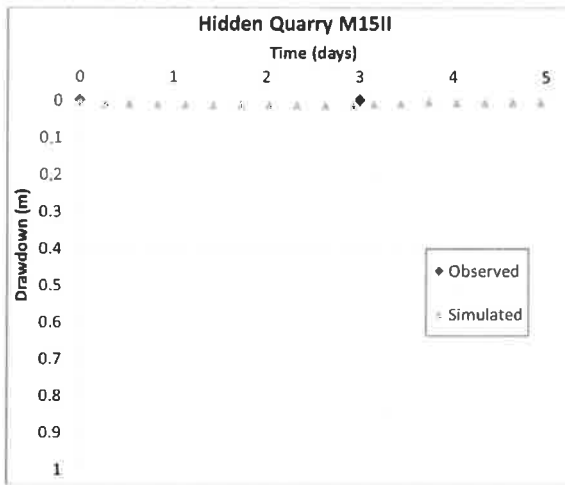


Figure 7. Simulated Drawdown Response at Hidden Quarry - M15II, 1.3 km from Rockwood Well 4

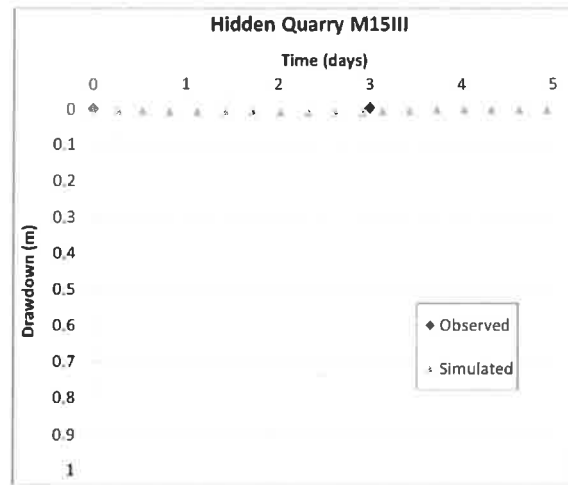


Figure 8. Simulated Drawdown Response at Hidden Quarry - M15III, 1.3 km from Rockwood Well 4

### 2.2.2 Calibration to Bernardi Well 3 Constant Rate Pumping Test

Calibration of the model in the area surrounding Bernardi Well 3 was completed in a similar manner as Rockwood Well 4. Observed drawdown data from a 72-hour constant rate ( $1,175 \text{ m}^3/\text{day}$ ) test of Bernardi Well 3, conducted in May 2002 (Burnside 2002), was used to calibrate the numerical model. Nineteen wells were monitored during the test and used as calibration targets. Special attention was given to calibrating drawdown in the immediate vicinity of Well 3 (i.e., OW3D, 4D and 5D located 300 to 500 m north of Well 3), as well as drawdown in domestic wells (e.g., Perkes located 480 m southeast of Well 3 and Hiltz located 680 m east of Well 3).

The final hydraulic conductivity values applied in the area of Bernardi Well 3 were guided by the interpreted range of hydraulic conductivity and transmissivity values for those hydrogeologic units, as presented in Golder Associates (2011), Burnside (2015b; 2002) and Harden (2012). Both simulated and previously applied values of hydraulic conductivity are summarized in Table A1.

The observed and simulated drawdown and recovery curves for Bernardi Well 3 and the monitoring wells are presented in Figures 9 through 14. These figures show an excellent match between observed and simulated drawdown suggesting that the numerical model is appropriate to assess drawdown at Bernardi Well 3 for the Risk Assessment. As with the constant rate test at Rockwood Well 4, drawdown due to non-linear well losses at Bernardi Well 3 were estimated and added to the simulated results.

The discrepancy between simulated and observed drawdown occurring at the Perkes domestic well is likely due to the presence of a highly conductive fracture system that transmits drawdown more easily from Bernardi Well 3. Although the model does not replicate the amount of drawdown due to this site-specific feature, the drawdown at the other wells of similar distances from Well 3 are replicated by the model. Given the complex nature of the fractured rock environment, this level of calibration is considered acceptable for the application of the model to conduct the Risk Assessment scenarios.

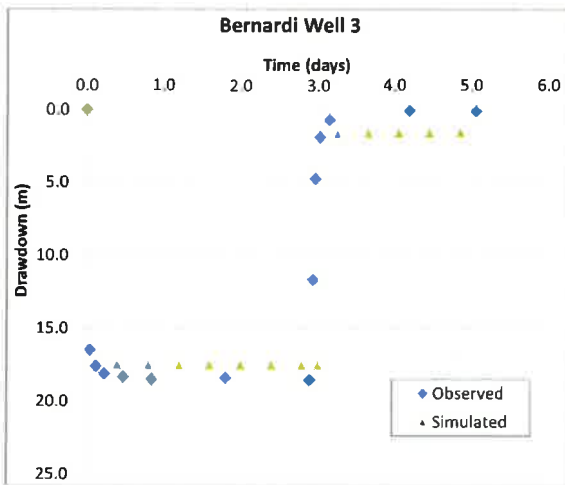


Figure 9. Simulated Drawdown Response at Bernardi Well 3

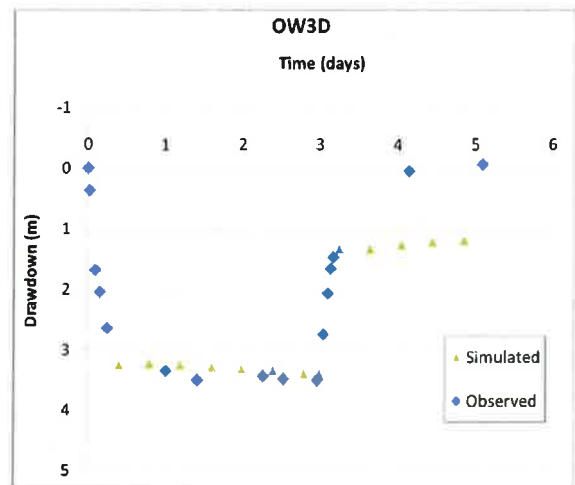


Figure 10. Simulated Drawdown Response at OW3D, located 420 m from Rockwood Well 3

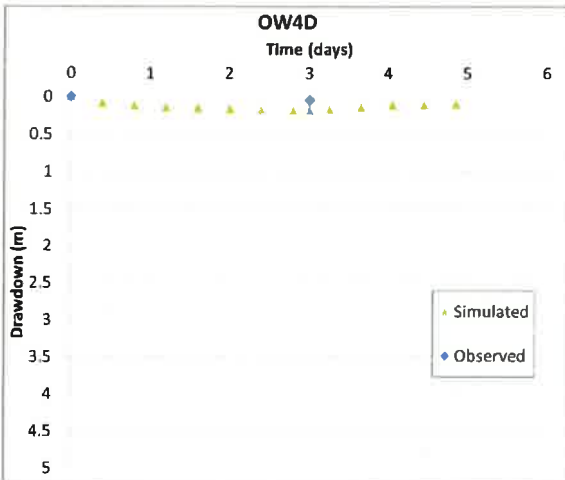


Figure 11. Simulated Drawdown Response at OW4D, located 500 m from Rockwood Well 3

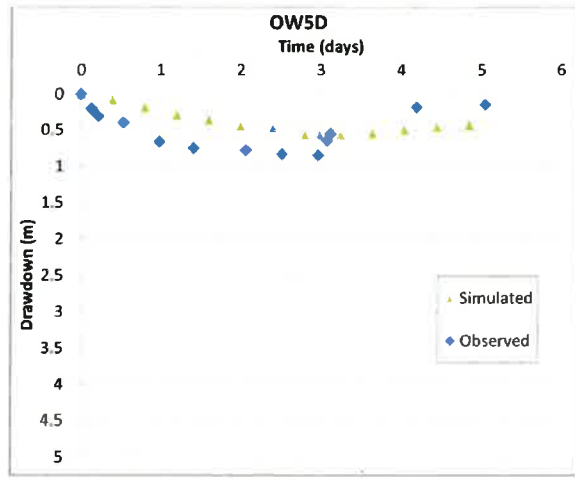


Figure 12. Simulated Drawdown Response at OW5D, located 300 m from Rockwood Well 3

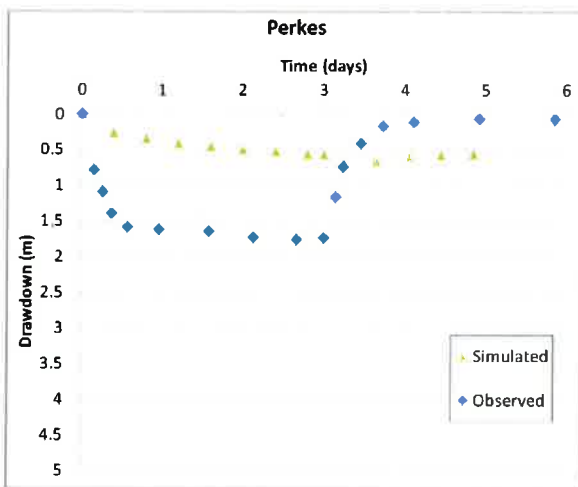


Figure 13. Simulated Drawdown Response at Perkes (Domestic Well), located 480 m from Rockwood Well 3

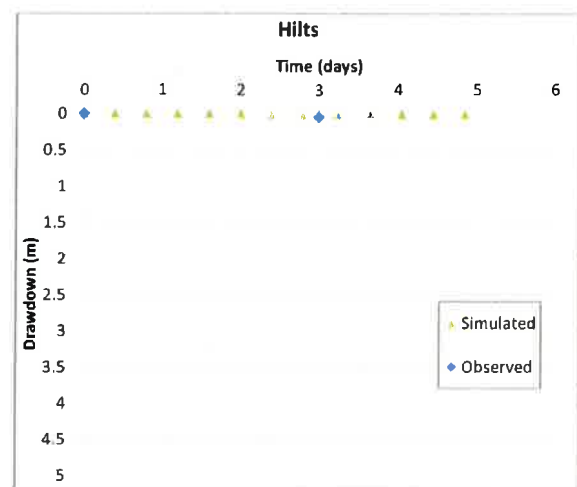


Figure 14. Simulated Drawdown Response at Hilts (Domestic Well), located 680 m from Rockwood Well 3

### 3 NUMERICAL MODEL UPDATES NEAR NESTLÉ WATERS CANADA

#### 3.1 Issue Identified by Municipal Review

Municipal reviewers identified the following concern related to the numerical model near Nestlé in Aberfoyle:

- 1) Municipal reviewers have requested verification that the Tier Three numerical model is adequately representing drawdown in the vicinity of Nestlé PTTW 7043-74BL3K (Section 2.4 above).

#### 3.2 Matrix Response

Additional data was made available to Matrix including data provided by Nestlé Canada, whose PTTW represents a notable water taking in this area. These data were used to refine the groundwater flow model to ensure adequate local, well field-scale response to pumping. These refinements included:

- Horizontal relocation of the well boundary condition representing Nestlé pumping well, TW3-80, using more precise coordinates than those previously provided by the PTTW database.
- Refinement of the vertical placement of the well boundary condition representing TW3-80 based on well maintenance details (i.e., liner installation depths and depths where the open bedrock interval was sealed; CRA 2004).
- Refinement of the finite element mesh surrounding TW3-80 to capture the steep hydraulic gradients that will be induced by pumping.

New documents reviewed as part of this process included:

- Nestlé Waters Canada, Test Pumping Investigation, Supply Well TW3-80 (CRA 2004)
- Nestlé Waters Canada, 2010 Annual Monitoring Report (CRA 2011)
- Nestlé Waters Canada, Test Pumping Investigation for TW2-11 (CRA 2012)
- Meadows of Aberfoyle – 2014 Annual Monitoring Report, Permit to Take Water No. 5626-7WLQ3W - Banks Groundwater Engineering Ltd. (Banks 2015)
- Royal Canin Canada, Hydrogeological Assessment and Pumping Test, Highway 401 and County Road 46, Puslinch, Ontario – SNC Lavalin Engineers and Constructors Inc. (SNC Lavalin 2005)

Matrix conducted local-scale, transient calibration of the groundwater model around TW3-80 to ensure the model is appropriately responding to pumping in this area. This calibration effort is discussed in the following section.

### 3.2.1 Calibration to TW3-80 Constant Rate Pumping Test

A 40-day constant rate pumping test was conducted on TW3-80 at a rate of 3,542 m<sup>3</sup>/day from August to October 2010 (CRA 2011), and observed water levels in monitoring wells were used to calibrate the Tier Three Assessment model near the Nestlé Aberfoyle plant. Other constant rate pumping test data at the site were also reviewed (i.e., 3-day pumping test [CRA 2004] and 11-day test [CRA 2012]); however, the 40-day test was selected for model calibration as the long duration ensures a more complete development of the area of influence of the pumping well.

The observed 40-day drawdown cone based on monitoring water level data from bedrock wells completed within the reported “Amabel Formation” was used as a calibration target. Focus was given to calibrating drawdown centrally at TW3-80 and non-linear well losses were taken into account. The final hydraulic conductivity values applied in the area of Nestlé were guided by the range of interpreted hydraulic conductivity values for hydrogeologic units presented in Golder Associates (2011), CRA (2011; 2004) and SNC Lavalin (2005). Both simulated and field-derived values of hydraulic conductivity are summarized in Table A2.

**Table A2 Summary of Bedrock Hydraulic Conductivity Values near Aberfoyle**

Unit	Hydraulic Conductivity from Previous Studies (m/s) <sup>1</sup>		Area in Numerical Model	Simulated Hydraulic Conductivity (m/s)	
	Min	Max		Min	Max
Goat Island	$9 \times 10^{-8}$	$4 \times 10^{-4}$	Nestlé / Royal Canin	$5 \times 10^{-6}$	$2 \times 10^{-4}$

<sup>1</sup> CRA 2011; 2004 and SNC Lavalin 2005.

The observed and simulated areal distribution of drawdown for the 40-day test at TW3-80 shows a good match between the observed (12.9 m) and simulated (13.7 m) drawdown at TW3-80 with non-linear well losses considered. With a difference of 0.8 m, the model slightly over predicts drawdown at the well, but the areal extent of the drawdown cone and the amount of drawdown radially away from TW3-80 is slightly under-predicted. In order to match the observed drawdown exactly, an increase in the complexity of zone of hydraulic conductivity is necessary in this fractured rock environment. As this is beyond the scope of the Tier Three Assessment, Matrix is satisfied that the calibration of the model in

this area is suitable and the model is considered appropriate for evaluation of the Risk Assessment scenarios.

#### **4 SUMMARY**

The Tier Three groundwater flow model was refined near the Town of Rockwood and near the operations of Nestlé in Aberfoyle. Water level response data from three constant rate pumping tests were used to improve transient model calibration near Rockwood Well 4 and Bernardi Well 3, as well as TW3-80 at Nestlé. These refinements have increased the confidence in the groundwater flow model in their respective areas and will increase the confidence in the Risk Assessment scenario results and the delineation of the WHPA-Q1, -Q2 and Water Quantity Vulnerable Areas.





GRAND RIVER CONSERVATION AUTHORITY

MEMORANDUM

TO: Kyle Davis, Wellington Source Water Protection  
FROM: James Etienne, Lake Erie Source Protection  
Region (LESPR)  
CC: Martin Keller, Township of Puslinch, Township of  
Guelph-Eramosa, Town of Erin, County of  
Wellington, City of Guelph, MNRF, MOECC,  
Matrix Solutions Inc.  
RE: Grand River Assessment Report and Source  
Protection Plan Update

DATE: 25 February 2016  
FILE:

REMARKS: ☐ Urgent ☒ For your review ☐ Reply ASAP ☐ Please Comment

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At a meeting to discuss the start-up of the Guelph/Guelph-Eramosa Risk Management Measures Evaluation Process (RMMEP), the project steering committee agreed that the June 19, 2015, Wellington Source Water Protection municipal peer review comments could be addressed in a revision of the Guelph/Guelph-Eramosa WQRA and that Matrix Solutions Inc. would work with the Townships of Guelph-Eramosa and Puslinch and the Town of Erin to produce the most up to date refinements of the WHPA-Q1 for sign-off of the WQRA. It was also agreed that Matrix would develop a Terms of Reference for the RMMEP which would also include a timetable, with input from the LESP, on a stakeholder input process to review water quantity policy development for the Grand River Source Protection Plan.

In his approval letter of the Grand River Source Protection Plan from November 25, 2015, Minister Glen Murray included the following statement:

*It is my understanding that the Tier 3 water budgets and related water quantity policy development are currently underway. I encourage you to complete this work as soon as possible and I look forward to receiving an amended plan as soon as possible once this work is completed, and no later than December 31, 2017.*

The deadline of end of 2017 for the submission of an updated Assessment Report and Grand River Source Protection Plan has been incorporated into the process and timeline outlined below.

## GRAND RIVER ASSESSMENT REPORT AND SOURCE PROTECTION PLAN UPDATE

The completion of the RMMEP, specifically the Threats Management Strategy, will provide options on how to address the significant water quantity drinking water threats. This will be the basis for the development of the water quantity policies.

A project team is proposed to be responsible for water quantity policy development. The aim is to have all municipalities who are directly affected by the policies being represented on the project team, together with Lake Erie Region staff. A broader stakeholder group comprised of neighbouring municipalities and representatives from other sectors such as agriculture, industry, business, development, and aggregate will have opportunities to comment at major milestones as part of the RMMEP and policy development process.

On a regular basis work in progress (e.g., RMMEP, Threats Assessment Strategy, policy development) is presented to the Lake Erie Region Source Protection Committee who is responsible for the updates to the Grand River Assessment Report and Source Protection Plan.

The following draft process and timeline aims to outline the major milestones and parties involved in the process.

Task	Timeline
Introduction of broader stakeholder group (e.g., industry, aggregate, agriculture, developers) to RMMEP and policy development process. Opportunity to provide input into RMM scenarios (meeting #6)	July/August 2016
Stakeholder group input into Draft Threats Management Strategy (workshop #12 and meeting #13)	January/February 2017
RMMEP write up of updated Grand River Assessment Report (GRCA)	January and February 2017
<b>Presentation of Draft Threats Management Strategy and updated Grand River Assessment Report to Lake Erie Source Protection Committee</b>	<b>March 2, 2017</b>
Development of first draft water quantity policies (project team)	March/April 2017
Stakeholder group input into first draft water quantity policies	May 2017
<b>Lake Erie Region Source Protection Committee considers first draft water quantity policies</b>	<b>June 1, 2017</b>
Refinements of draft water quantity policies (project team)	June – August 2017
Stakeholder group input into revised water quantity policies	August 2017
<b>Lake Erie Region Source Protection Committee considers revised draft water quantity policies</b>	<b>September 7, 2017</b>
Finalisation of water quantity policies (project team)	September 2017
<b>Lake Erie Region Source Protection Committee considers updated Grand River Assessment Report and Source Protection Plan and releases documents for formal public consultation</b>	<b>October 5, 2017</b>
Formal public consultation (45 days). Public meetings proposed in City of Guelph and Guelph Eramosa and Puslinch Townships	October 10 to November 24, 2017
<b>Lake Erie Region Source Protection Committee considers comments from public consultation process and releases final updated Grand River Assessment Report and Source Protection Plan to Grand River Source Protection Authority.</b>	<b>December 7, 2017</b>
<b>Grand River Source Protection Authority receives Updated Grand River Assessment Report and Source Protection Plan and releases documents for submission, together with any comments.</b>	<b>December 15, 2017</b>
Submission of Updated Grand River Assessment Report and Source Protection Plan to MOECC.	December 31, 2017



## Guelph/Guelph-Eramosa Tier 3 WQRA and RMMEP Municipal Peer Review Meeting

**April 1, 2016, 10:00am to noon**

**GRCA Head Office (400 Clyde Road, Cambridge)**

### Agenda

#### Meeting Objectives:

- Review Matrix responses to June 19, 2015 municipal peer review comments on the draft Tier 3 Water Quantity Risk Assessment (WQRA) report.
- Provide Matrix with direction to complete the WQRA.
- Review Terms of Reference for the Risk Management Measures Evaluation Process (RMMEP).
- Review proposed timing for RMMEP and water quantity policy amendments to the Grand River Source Protection Plan.
- Schedule meetings for finalizing the WQRA and commencing the RMMEP.

10:00 to 10:05	Welcome and Introductions	J. Etienne
10:05 to 11:00	Responses to Municipal Peer Review Comments <ul style="list-style-type: none"> <li>• Town of Erin</li> <li>• Township of Puslinch</li> <li>• Township of Guelph-Eramosa</li> </ul>	P. Chin
11:00 to 11:45	Review Terms of Reference for the RMMEP <ul style="list-style-type: none"> <li>• RMMEP Schedule</li> <li>• Water Quantity Policy Development Schedule</li> </ul>	P. Chin M. Keller
11:45 to 11:55	Upcoming meetings <ul style="list-style-type: none"> <li>• WQRA Sign-off</li> <li>• RMMEP Start-up</li> </ul>	P. Chin J. Etienne
11:55 to 12:00	Next Steps	J. Etienne





## **Guelph/Guelph-Eramosa Tier 3 WQRA and RMMEP Municipal Peer Review Meeting**

**Friday April 1, 2016**

### **Meeting Notes**

**Attendees:** J. Etienne and M. Keller – Grand River Conservation Authority  
D. Belanger and P. Rider – City of Guelph  
J. Baxter and D. Smikle – R.J. Burnside (for Guelph-Eramosa Township)  
A. Salis – Wellington County  
K. Davis – Wellington Source Water Protection  
R. Blackport – Blackport Hydrogeology (for Town of Erin)  
S. Denhoed – Harden Environmental Services (for Puslinch Township)  
K. Baker and C. Doughty – Ministry of the Environment & Climate Change  
S. Bates – Ministry of Natural Resources & Forestry  
P. Chin and P. Meyer – Matrix Solutions

#### **1. Welcome and Introductions**

J. Etienne introduced the meeting participants and reviewed the meeting objectives:

- Review Matrix responses to June 19, 2015 municipal peer review comments on the draft Tier 3 Water Quantity Risk Assessment (WQRA) report.
- Provide Matrix with direction to complete the WQRA.
- Review Terms of Reference for the Risk Management Measures Evaluation Process (RMMEP).
- Review proposed timing for RMMEP and water quantity policy amendments to the Grand River Source Protection Plan.
- Schedule meetings for finalizing the WQRA and commencing the RMMEP.

#### **2. Responses to Municipal Peer Review Comments**

P. Chin presented explanations of the Matrix Solutions responses to the municipal peer review comments submitted by Wellington Source Water Protection (WSWP) on June 19, 2015. Comments highlighted in grey in the following tables represent comments of concern identified by Harden Environmental Services Inc. and R.J. Burnside & Associates Ltd. that remain of significant concern following the meeting.

**Guelph/Guelph-Eramosa Tier 3 WQRA and RMMEP Municipal Peer Review Meeting  
Meeting Notes – April 1, 2016**

**Table 1: Town of Erin Comments, Blackport Hydrogeology**

No.	Matrix Response	Consultant Response
1	Matrix is completing both the Tier 3 Assessment and the RMMEP.	Comment addressed
2a	There will not be duplication of Tier 3 Assessment scenarios.	Comment addressed
2b	Matrix agrees with this comment.	Comment addressed
2c	'Recharge' refers to water that moves from ground surface.	Comment addressed
3	Matrix agrees with this comment.	Comment addressed
4	Matrix agrees with this comment.	Comment addressed

**Table 2: Puslinch Township Comments, Harden Environmental Services**

No.	Matrix Response	Harden Concern	Consultant Response
1	Previous conceptualization maintained.	Additional baseflow analysis in Eden Mills identified as data gap.	Comment unresolved
2	Bedrock units in area were re-interpreted as Gasport and Goat Island formations based on new information provided.		No further comment
3	Tier 3 models are consistent between Guelph/GET Tier 3 and ROW/Cambridge Tier 3.		No further comment
4a	Conducted local-scale calibration of area using 40-day constant rate test data to ensure representative local, well-field scale response to pumping.		No further comment
4b	Given the review, the model is considered well calibrated for the purposes of the Tier 3 and estimation of the WHPA-Q1.		No further comment
4c	PTTW for Meadows of Aberfoyle will be updated in the final report.		No further comment
4d	Kraus Nurseries PTTW removed from the numerical model.		No further comment
4e	Kats Okashimo Fish Farm PTTW removed from the numerical model.		No further comment
5	5 municipal wells had drawdown that came within 1 m of safe water level in drought scenarios, suggesting a warranted elevated water quantity risk level for the City of Guelph water supplies.	Harden suggests it is important to consider all factors prior to finalizing Significant Risk Level assignment and emphasizes Comment 1 and 2.	Comment unresolved
6	These permitted SW takings will be examined during the threats ranking portion of the RMMEP.		No further comment
7	Matrix agrees with this comment.		No further comment

**Table 3: Guelph-Eramosa Township Comments, R.J. Burnside & Associates**

**Guelph/Guelph-Eramosa Tier 3 WQRA and RMMEP Municipal Peer Review Meeting  
Meeting Notes – April 1, 2016**

No.	Matrix Response	Burnside Concern	Consultant Response
1	Previous conceptualization maintained.	Additional baseflow analysis in Eden Mills identified as data gap.	Comment unresolved
2	Matrix is confident with current conceptualization of bedrock valley.	Expression of bedrock valley east of Guelph maybe biased by interpolation of data.	Comment unresolved
3	Bedrock units in area were re-interpreted as Gasport and Goat Island formations based on new information provided.	The calibration of Wells 3 & 4 may indicate the hydraulic conductivity of shallow bedrock needs to be increased.	Comment unresolved
4	New rates have been received (2026 avg day flow of 1,907 m <sup>3</sup> /day) and will be used in the revised Risk Assessment.		No further comment
5	SAAD values for Hamilton Drive and Rockwood municipal wells will be updated in WQRA based on Table 1.		No further comment
6	Well 4 will be added to the Tier 3 Study and relevant analysis and documentation will be updated.		No further comment
7	Report name will be updated, as well as appropriate text.		No further comment

In discussion with the municipal consultants regarding their outstanding concerns regarding Eramosa River water loss in Eden Mills, the interpretation of the bedrock valley east of Rockwood, the drawdown between Guelph and Aberfoyle north of the Nestle water taking and the triggering of the Significant risk level, J. Etienne explained that the municipal peer review process allows for the amendment of the draft document to include new information and reassessment of model results. All municipal peer review comments and responses will be documented. J. Etienne noted, that per provincial peer review guidance documentation, any outstanding differences between comments and responses will be addressed as scientifically defensible or as opportunities for update in future work through the filling of data gaps. The municipal consultants, WSWP and the County all expressed concern that the outstanding concerns were unresolved.

With respect to the process and timing to finalize the risk level or WHPA-Q1 boundaries, K. Baker advised that the MOECC are finalizing their formal response to WSWP to address these questions. K. Baker also indicated that given the time and effort to date, the bar would be quite high for new data to trigger a change in the model during the RMMEP. The group also discussed the process of completing the peer review process and S. Bates confirmed that the term "sign-off" meant the peer reviewers were satisfied that their comments had been received, responded to and integrated into the Tier 3 Water Budget and Peer Review documentation. With respect to the municipal consultant peer review, it was not expected that "sign-off" would require formal Council approvals of the Tier 3 documentation. Finalization of the Guelph/Guelph-Eramosa WQRA with municipal peer review amendments proposed by the Townships of Puslinch and Guelph-Eramosa and the Town of Erin will include a final presentation to and sign-off by the Provincial Peer Review Team (D. Rudolph, H. Whiteley and T. Lottimer).

### **3. Review Terms of Reference for the RMMEP**

## **Guelph/Guelph-Eramosa Tier 3 WQRA and RMMEP Municipal Peer Review Meeting Meeting Notes – April 1, 2016**

The WSWP have expressed concerns about the ability to achieve completion of the WQRA, RMMEP and water quantity policies for the finalization of the amended Grand River Source Water Protection Plan by December 31, 2017, as requested by the MOECC. The MOECC will address this concern in their formal response to the WSWP. K. Baker suggested that the Province would like to maintain the December 31, 2017 target deadline to encourage all parties to use the best available time management approaches to keep the proposed project completion on time as opposed to setting new a deadline right away.

A. Salis noted that Wellington County stressed the importance that accurate data be collected and used, the final WQRA be technically defensible and that the WHPA-Q1 should not be “set in stone” if significant new information became available.

M. Keller added that RMMEP policy development within the WHPA-Q1 would focus on management of quantity rather than development constraint.

### **4. Upcoming Meetings and Activities**

P. Chin proposed a list of due dates for completion of the WQRA and commencement of the RMMEP:

- April 30<sup>th</sup> – WSWP provides comments on the March 4<sup>th</sup> and 7<sup>th</sup> response memos
- May 15<sup>th</sup> – Matrix circulates the draft Amended WQRA
- May 31<sup>st</sup> – Joint Municipal and Provincial Peer Review meeting
- May 31<sup>st</sup> – RMMEP Kick-Off
- June 15<sup>th</sup> – Matrix receives comments on the draft Amended WQRA
- June 30<sup>th</sup> – Matrix circulates final Guelph/Guelph-Eramosa WQRA
- July 15<sup>th</sup> – Peer Reviewer sign-off on Guelph/Guelph-Eramosa WQRA
- July 31<sup>st</sup> – LESPR submits Peer Review Summary Report to MNR

K. Davis and A. Salis indicated that they could not commit to a timeline during the meeting.

M. Keller confirmed that the policy leads would be the respective municipalities (ie Guelph for their jurisdiction and the Wellington County municipalities for their jurisdiction). M. Keller also indicated that the WQRA, RMMEP and policies would eventually go to the Lake Erie Source Protection Committee for review and approval.

### **5. Next Steps**

J. Etienne will circulate a Doodle to schedule upcoming meetings. P. Chin will provide a redacted copy of the Powerpoint slides for circulation to the meeting participants. J. Etienne will prepare summary notes from the meeting for circulation to the meeting participants.





Dufferin Aggregates  
2300 Steeles Ave W, 4<sup>th</sup> Floor  
Concord, ON L4K 5X6  
Canada

May 12, 2016

Seana Richardson  
Aggregates Technical Specialist  
Ministry of Natural Resources  
Guelph District  
1 Stone Road West  
Guelph, Ontario  
N1G 4Y2

RECEIVED

MAY 13 2016

Township of Puslinch

Attention: Ms. Richardson

**Re: Monthly Monitoring Report  
Mill Creek Pit, License #5738  
Township of Puslinch, Wellington County**

Please find enclosed the required monitoring data for the month of April 2016. As indicated, there were no exceedances to report in this month.

If you have any questions, please do not hesitate to call.

Sincerely,

Ron Van Ooteghem  
Site Manager

C.c.

Karen Landry (Township of Puslinch)  
Sonja Strynatka (GRCA)  
Kevin Mitchell (Dufferin Aggregates)  
University of Guelph

Monthly Reporting  
Mill Creek Aggregates Pit  
April 2016

Date	DP21 (mASL)	Threshold Value (mASL)	Exceedance
4-Apr-16		305.60	NO
14-Apr-16	305.97	305.60	NO
21-Apr-16	305.83	305.60	NO
27-Apr-16	305.92	305.60	NO

Date	BH13 (mASL)	DP21 (mASL)	Head Difference (m)	Threshold Value (m)	Exceedance
4-Apr-16	306.65			0.11	NO
14-Apr-16	306.40	305.97	0.43	0.11	NO
21-Apr-16	306.36	305.83	0.53	0.11	NO
27-Apr-16	306.15	305.92	0.23	0.11	NO

Date	DP17 (mASL)	Threshold Value (mASL)	Exceedance
4-Apr-16	305.40	305.17	NO
14-Apr-16	305.35	305.17	NO
21-Apr-16	305.27	305.17	NO
27-Apr-16	305.31	305.17	NO

Date	BH92-12 (mASL)	DP17 (mASL)	Head Difference (m)	Threshold Value (m)	Exceedance
4-Apr-16	305.63	305.40	0.23	0.14	NO
14-Apr-16	305.56	305.35	0.21	0.14	NO
21-Apr-16	305.51	305.27	0.24	0.14	NO
27-Apr-16	305.60	305.31	0.29	0.14	NO

Date	DP3 (mASL)	Threshold Value (mASL)	Exceedance
4-Apr-16		304.54	NO
7-Apr-16	305.13	304.54	NO
14-Apr-16	304.92	304.54	NO
21-Apr-16	304.74	304.54	NO
27-Apr-16	304.83	304.54	NO

Date	DP6 (mASL)	DP3 (mASL)	Head Difference (m)	Threshold Value (m)	Exceedance
4-Apr-16	305.87			0.73	NO
7-Apr-16	305.98	305.13	0.85	0.73	NO
14-Apr-16	305.81	304.92	0.89	0.73	NO
21-Apr-16	305.68	304.74	0.94	0.73	NO
27-Apr-16	305.75	304.83	0.92	0.73	NO

Date	DP2 (mASL)	Threshold Value (mASL)	Exceedance
4-Apr-16		303.69	NO
14-Apr-16	304.30	303.69	NO
21-Apr-16	304.24	303.69	NO
27-Apr-16	304.31	303.69	NO

Date	BH92-27 (mASL)	DP2 (mASL)	Head Difference (m)	Threshold Value (m)	Exceedance
4-Apr-16	305.12			0.34	NO
14-Apr-16	305.16	304.30	0.86	0.34	NO
21-Apr-16	305.14	304.24	0.90	0.34	NO
27-Apr-16	305.28	304.31	0.97	0.34	NO

Date	DP1 (mASL)	Threshold Value (mASL)	Exceedance
4-Apr-16		303.97	NO
14-Apr-16	304.43	303.97	NO
21-Apr-16	304.30	303.97	NO
27-Apr-16	304.41	303.97	NO

Date	BH92-29 (mASL)	DP1 (mASL)	Head Difference (m)	Threshold Value (m)	Exceedance
4-Apr-16				0.17	NO
14-Apr-16		304.43		0.17	NO
21-Apr-16		304.30		0.17	NO
27-Apr-16	305.58	304.41	1.17	0.17	NO

Date	DP5C (mASL)	Threshold Value (mASL)	Exceedance
4-Apr-16		302.86	NO
14-Apr-16	303.24	302.86	NO
21-Apr-16	303.14	302.86	NO
27-Apr-16	303.05	302.86	NO

Date	OW5-84 (mASL)	DP5C (mASL)	Head Difference (m)	Threshold Value (m)	Exceedance
4-Apr-16	303.77			0.30	NO
14-Apr-16	303.73	303.24	0.49	0.30	NO
21-Apr-16	303.69	303.14	0.55	0.30	NO
27-Apr-16	303.72	303.05	0.67	0.30	NO

Notes:

Please note that blank cells denote frozen conditions in the well.





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### Instrument Proposal Notice:

**Proponent:** Victoria Park Village Inc.  
410 Industrial Drive  
Milton Ontario  
Canada L9T 5A6

**Instrument Type:** Permit to Take Water - OWRA s. 34

**EBR Registry Number:** 012-7633

**Ministry Reference Number:** 3060-A9EHZG

**Ministry:**  
Ministry of the Environment and  
Climate Change

**Date Proposal loaded to the  
Registry:**  
May 13, 2016

**Keyword(s):** Water | Wells

Comment Period: 30 days: submissions may be made between May 13, 2016 and June 12, 2016.

### Description of Instrument:

This proposal is for a new category 3 permit to take water servicing Victoria Park Village Inc., as follows:

**Source Name:** Excavations  
**Purpose:** Construction  
**Maximum rate per minute:** 3000 L/min.  
**Maximum number of hours of taking a day:** 24  
**Maximum volume per day:** 2,197,000 L/day  
**Typical volume per day:** 699,000 L/day  
**Maximum number of days of taking in a year:** 365  
**Earliest calendar date of taking (mm/dd):** 01/01  
**Latest calendar date of taking (mm/dd):** 12/31  
**Duration:** 2 years

**Source Name:** Torrance Creek  
**Purpose:** Construction  
**Maximum rate per minute:** 24,000 L/min.  
**Maximum number of hours of taking a day:** 24  
**Maximum volume per day:** 34,560,000 L/day  
**Typical volume per day:** 8,640,000 L/day  
**Maximum number of days of taking in a year:** 92  
**Earliest calendar date of taking (mm/dd):** 07/01  
**Latest calendar date of taking (mm/dd):** 09/30  
**Duration:** 2 years

**Source Name:** Pond A  
**Purpose:** Construction  
**Maximum rate per minute:** 24,000 L/min.  
**Maximum number of hours of taking a day:** 24  
**Maximum volume per day:** 11,056,000 L/day  
**Typical volume per day:** 8,640,000 L/day  
**Maximum number of days of taking in a year:** 92  
**Earliest calendar date of taking (mm/dd):** 07/01  
**Latest calendar date of taking (mm/dd):** 09/30  
**Duration:** 2 years

**Source Name:** Pond B  
**Purpose:** Construction

### Contact:

**All comments on this  
proposal must be directed to:**

West Central Region  
Permit To Take Water Evaluator  
Ministry of the Environment and  
Climate Change  
Operations Division  
West Central Regional Office  
119 King Street West  
Floor 12  
Hamilton Ontario  
L8P 4Y7  
Phone: (905) 521-7833  
Fax: (905) 521-7820  
Toll Free Phone: (800) 668-4557

**To submit a comment online,  
click the submit button  
below:**

[Submit Comment](#)

### Location(s) Related to this Instrument:

Property of Victoria Park Village  
Inc.

1159 Victoria Road South, Lot:  
5, Concession: 8, Geographic  
Township of Puslinch, City of  
Guelph, County of Wellington

CITY OF GUELPH

Maximum rate per minute: 24,000 L/min.  
Maximum number of hours of taking a day: 24  
Maximum volume per day: 365,640 L/day  
Typical volume per day: 365,640 L/day  
Maximum number of days of taking in a year: 92  
Earliest calendar date of taking (mm/dd): 07/01  
Latest calendar date of taking (mm/dd): 09/30  
Duration: 2 years

**Public Consultation:**

This proposal has been posted for a 30 day public review and comment period starting May 13, 2016. If you have any questions, or would like to submit your comments, please do so by June 12, 2016 to the individual listed under "Contact". Additionally, you may submit your comments on-line.

All comments received prior to June 12, 2016 will be considered as part of the decision-making process by the Ministry if they are submitted in writing or electronically using the form provided in this notice and reference EBR Registry number 012-7633.

Please Note: All comments and submissions received will become part of the public record. Comments received as part of the public participation process for this proposal will be considered by the decision maker for this proposal.

Your personal information may be used in the decision making process on this proposal and it may be used to contact you if clarification of your comment is required. It may be shared (along with your comment) with other Ontario Ministries for use in the decision making process. Questions about this collection should be directed to the contact mentioned on the Proposal Notice page.

**Additional Information:**

The following government offices have additional information regarding this Proposal. To arrange a viewing of these documents please call the Ministry Contact or the Office listed below.

West Central Regional Office  
119 King Street West  
Floor 12  
Hamilton Ontario  
L8P 4Y7  
Phone: (905) 521-7640  
Toll Free Phone: (800) 668-4557

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### Instrument Proposal Notice:

**Proponent:** Royal Canin Canada Company  
100 Beiber Road  
Rural Route Delivery 3  
Guelph Ontario  
Canada N1H 6H9

**Instrument Type:** Permit to Take Water - OWRA s. 34

**EBR Registry Number:** 012-7700

**Ministry Reference Number:** 5087-AA5J5G

**Ministry:**  
Ministry of the Environment and  
Climate Change

**Date Proposal loaded to the  
Registry:**  
May 24, 2016

**Keyword(s):** Water | Wells

**Comment Period:** 30 days: submissions may be made between May 24, 2016 and June 23, 2016.

### Description of Instrument:

This proposal is a renewal of Permit to Take Water Number 8288-97HQGG. Water is being taken from one (1) well for a pet nutrition products processing plant in the Township of Puslinch, Ontario.

Details of the water taking are as follows:

Source of water: well  
Purpose of taking: pet nutrition processing  
Maximum rate per minute (Litres): 333  
Maximum number of hours of taking per day: 24  
Maximum volume per day (Litres): 240,000  
Maximum number of days of taking per year: 365  
Period of taking: 10 years

### Public Consultation:

This proposal has been posted for a 30 day public review and comment period starting May 24, 2016. If you have any questions, or would like to submit your comments, please do so by June 23, 2016 to the individual listed under "Contact". Additionally, you may submit your comments on-line.

All comments received prior to June 23, 2016 will be considered as part of the decision-making process by the Ministry if they are submitted in writing or electronically using the form provided in this notice and reference EBR Registry number 012-7700.

Please Note: All comments and submissions received will become part of the public record. Comments received as part of the public participation process for this proposal will be considered by the decision maker for this proposal.

Your personal information may be used in the decision making process on this proposal and it may be used to contact you if clarification of your comment is required. It may be shared (along with your comment) with other Ontario Ministries for use in the decision making process. Questions about this collection should be directed to the contact mentioned on the Proposal Notice page.

### Contact:

**All comments on this  
proposal must be directed to:**

West Central Region  
Permit To Take Water Evaluator  
Ministry of the Environment and  
Climate Change  
Operations Division  
West Central Regional Office  
119 King Street West  
Floor 12  
Hamilton Ontario  
L8P 4Y7  
Phone: (905) 521-7833  
Fax: (905) 521-7820  
Toll Free Phone: (800) 668-4557

**To submit a comment online,  
click the submit button  
below:**

[Submit Comment](#)

### Location(s) Related to this Instrument:

100 Beiber Road  
Address: Lot: 28, Concession: 8,  
Geographic Township:  
PUSLINCH, Puslinch, Township,  
County of Wellington

PUSLINCH

### Additional Information:

**The following government  
offices have additional**

**information regarding this Proposal. To arrange a viewing of these documents please call the Ministry Contact or the Office listed below.**

West Central Regional Office  
119 King Street West  
Floor 12  
Hamilton Ontario  
L8P 4Y7  
Phone: (905) 521-7640  
Toll Free Phone: (800) 668-4557

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## Want to visit Webster's Falls? Be ready to pay \$15

Joel OpHardt

Hamilton Spectator | May 11, 2016

The Hamilton Conservation Authority has hiked its fees at Spencer Gorge/Webster Falls Conservation Area in an effort to curb the influx of weekend visitors.

"The local environment is taking a pounding," said chief administrative officer Chris Firth-Eagland who estimates the park has seen more than 3,000 people at a time during a peak weekend — the park's estimated capacity.

He said conservative estimates suggest the park had 140,000 visitors in 2015, up from about 80,000 two years earlier. The increased human activity not only endangers a fragile ecosystem, including century old trees, "sensitive plant regimes," and bird species like the recently departed Louisiana Waterthrush, it has also created traffic and parking issues for locals.

"The place is gridlocked when the leaves change colours," said Firth-Eagland.

As one step in the solution, said Firth-Eagland, the HCA has aligned its pricing to be similar to prominent HCA attractions like Christie Lake, Dundas Valley, Valens Lake and Fifty Point. As of May 21, visitors will pay a \$10 parking fee and \$5 per person to gain access to the Spencer Gorge/Webster Falls park. The revised fee schedule also applies to the Tew Falls parking area and site.

Between May 21 and Oct. 31, HCA membership passes will not gain free admittance on weekends. In all other HCA conservation areas the membership passes will remain valid on weekends and admittance fees appear to remain unchanged.

The City of Waterfalls Initiatives founder Chris Ecklund says the move by the HCA wasn't surprising.

"For the waterfall initiative as a whole, the Number 1 complaint is the cost of admission to the HCA properties in general," said Ecklund. "We have people saying they can't afford it because they're on a fixed income.

"This cost is insanity."

With the golden years of Hamilton's industry behind it, Ecklund believes promoting the city's unique waterfall system is a rare opportunity to transform its image.

"You are talking about (land) that costs the taxpayers millions of dollars, and they want to shut these jewels down?"

Boleslaw Dworzak, a 67-year-old retired engineer who now spends his time creating 3-D virtual reality tours of Hamilton's waterfalls, was at the park Tuesday when he noticed signage warning fees would soon increase.

That day he was able to pay \$2 per hour for a total of \$4 for the trip.

"To pay \$15 for a two-hour visit, I'm lucky I don't have to go there again for a while," said Dworzak, who said he's happy to keep busy with Hamilton's other waterfalls for the time being, so long as those fees haven't been hiked as well.

The revenue from gate receipts are where the money comes from to support the land, said Firth-Eagland, and with increased prices residents can expect slow and steady improvements over time.

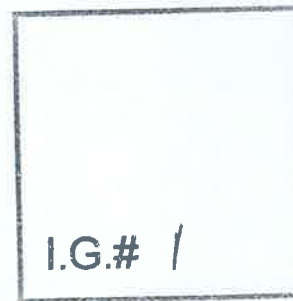
This year the park has installed new waste containers in attempt to curb littering, and administrators are in the process of designing a new staircase to the bottom of Webster Falls — one that will be up to code and include a stable platform at the bottom, said Firth-Eagland.

To avoid congestion, Firth-Eagland recommends visiting Webster Falls during the week or off-peak season. If the cost is prohibitive, he recommends a few of the HCA's passive areas like Fletcher Creek Ecological Preserve in Flamborough and the Devil's Punch Bowl in Stoney Creek. There is no admission fee for those areas, and parking can be found for about \$2.

jophardt@thespec.com

905-526-3408

Joel OpHardt is a reporter with the Hamilton Spectator. Email: jophardt@thespec.com .



The Hamilton Conservation Authority is increasing admission prices at Webster Falls in an effort to curb the influx of visitors on weekends.





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#### Instrument Decision Notice:

**Proponent:** Puslinch Beach & Marine Limited  
43 McClintock Drive  
Puslinch Ontario  
Canada N3C 2V4

**Instrument Type:** Environmental Compliance Approval (project type: sewage) -  
EPA Part II.1-sewage



**Keyword(s):** Sewage

**EBR Registry Number:** 012-4307

**Ministry Reference Number:** 4268-9S2RHA

**Ministry:** Ministry of the Environment and Climate Change

**Date Proposal loaded to the Registry:** June 08, 2015

**Date Decision loaded to the Registry:** May 16, 2016

#### Decision on Instrument:

An amendment has been granted to Environmental Compliance Approval (Sewage) Number 6634-962NNY issued for the approval of subsurface disposal works to service facilities located at McClintock Trailer Park in the Township of Puslinch, County of Wellington.

The approved works include thirty-one (31) subsurface disposal systems, each comprised of septic tanks, pump chambers and leaching beds.

The existing facilities served by the approved works include 160 trailer sites, a restaurant, a residence/office building, a bunkhouse and a maintenance garage.

The combined sewage flow is approximately 36,800 litres per day.

The proposed amendment is for revising the design capacity of one of the approved septic systems, which was originally designed to service 31 trailer sites with a peak design flow of 6,500 litres per day, consisting of a 13,000 litres septic tank, an effluent pump tank and a disposal field.

The system as installed consists of a raw sewage pump tank, a 14,100 litres septic tank, an effluent pump tank and a disposal field, and has a design capacity of 6,800 litres per day.

This design capacity is sufficient to service 26 trailer sites and one three-bedroom dwelling, which have a combined peak flow of 6,800 litres per day. Thus, one three-bedroom dwelling will be added to the site. Some trailer sites may be decommissioned.

The attached Certificate document is intended for posting on the Environmental Registry in order to provide the reader with the substantive content of the issued instrument. Please note the official version may be differently formatted or otherwise contain minor variations from this version.

#### Comment(s) Received on the Proposal: 0

Public Consultation on the proposal for this decision was provided for 45 Days, from June 08, 2015 to July 23, 2015.

#### Contact:

Application Assessment Officer  
Ministry of the Environment and Climate Change  
Operations Division  
Environmental Approvals  
Access and Service Integration  
Branch  
Application Verification Unit  
135 St. Clair Avenue West  
Floor 1  
Toronto Ontario  
M4V 1P5  
Phone: (416) 314-8001  
Fax: (416) 314-8452  
Toll Free Phone: (800) 461-6290

#### Location(s) Related to this Instrument:

Puslinch N3C 2V4  
Lot:4 Concession:1  
County of Wellington

#### TOWNSHIP OF PUSLINCH

#### Additional Information:

The following government offices have additional information regarding this Decision. To arrange a viewing of these documents please call the Ministry Contact or the Office listed below.

As a result of public consultation on the proposal, the Ministry received a total of 0 comments.

**Effect(s) of Consultation on this Decision:**

No comments were received.

**Leave to Appeal Provisions:**

Any resident of Ontario may seek leave to appeal this decision, by serving written Notice, within 15 days of May 16, 2016 upon all of the following:

**Appellate Body:**

Secretary  
Environmental Review Tribunal  
655 Bay Street  
Floor 15  
Toronto  
M5G 1E5  
Phone: (416) 212-6349  
Fax: (416) 326-5370  
Toll Free Phone: (866) 448-2248

**Environmental Commissioner of Ontario:**

Environmental Commissioner of Ontario  
1075 Bay Street  
Suite 605  
Toronto Ontario  
M5S 2B1  
Phone: (416) 325-3377  
Toll Free Phone: (800) 701-6454

**Issuing Authority:**

Fariha Pannu  
Supervisor  
Environmental Approvals Branch  
135 St. Clair Avenue West  
Floor 1  
Toronto Ontario  
M4V 1P5  
Phone: (416) 314-7092  
Toll Free Phone: (800) 461-6290

**Proponent:**

Puslinch Beach & Marine Limited  
43 McClintock Drive  
Puslinch Ontario  
Canada N3C 2V4

The Notice must be signed and dated and include all of the following information:

1. The EBR Registry Number, the Ministry Reference Number, the Proponent's name and address to whom the instrument was issued and the location of Activity. (All available from this Registry posting)
2. A copy of any comments that were submitted on the original proposal, if comments were not submitted, an explanation of your interest in seeking leave to appeal the decision is required.
3. A description of the grounds for the application for leave to appeal including information that demonstrates that:  
(a) there is a good reason to believe that no reasonable person, having regard to the relevant law and any government policies developed to guide decisions of that kind, could have made the decision; and

Guelph District Office  
1 Stone Road West  
Floor 4  
Guelph Ontario  
N1G 4Y2  
Phone: (519) 826-4255  
Toll Free Phone: (800) 265-8658

Environmental Approvals  
Access and Service Integration  
Branch  
135 St. Clair Avenue West  
Floor 1  
Toronto Ontario  
M4V1P5  
Phone: (416) 314-8001  
Toll Free Phone: (800) 461-6290

**The documents linked below  
are provided for the purposes  
of enhancing public  
consultation.**

All links will open in a new  
window

**1. Copy Of Environmental  
Compliance Approva  
I # 4268-9S2RHA**

(b) the decision in respect of which an appeal is sought could result in significant harm to the environment.

4. The portion of the instrument or each term or condition in the instrument in respect of which the leave to appeal is applied for.

5. The grounds on which you intend to reply at the hearing, in the event that the leave to appeal is granted, in relation to each portion that you are seeking leave to appeal.

[View Proposal](#)

[Add Notice into My Watch List](#)

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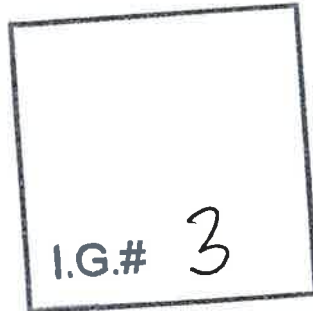
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RECEIVED

MAY 24 2016

Township of Puslinch



May 18, 2018

Good afternoon:

We look forward to seeing you at this year's Municipal Night at the Blyth Festival on Tuesday, June 28, 2016 at 8 p.m. for a performance of "The Birds and the Bees". A reception will be held at 7 p.m. prior to the performance.

The Township of North Huron and the Blyth Festival is pleased to make available two complimentary tickets to each municipality. Additional tickets may be purchased at the special rate of \$20 each.

To reserve your complimentary tickets, please RSVP by June 20<sup>th</sup> to Barb Black, Administrative Assistant at 519-357-3550 x21 or [bblack@northhuron.ca](mailto:bblack@northhuron.ca)

Don't miss out on what is sure to be a fantastic evening of entertainment – call early to reserve your tickets!

Sincerely,

Sharon Chambers, CAO  
519-357-3550 x24  
[schambers@northhuron.ca](mailto:schambers@northhuron.ca)

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P.O. Box 90, 274 Josephine Street, Wingham, Ontario N0G 2W0  
Phone: 519-357-3550 Fax: 519-357-1110

[www.northhuron.ca](http://www.northhuron.ca)



Canadian Theatre  
**BLYTH**  
FESTIVAL

# *You're Invited*

## **MUNICIPAL NIGHT at the BLYTH FESTIVAL**

**Tuesday, June 28, 2016**  
**Reception in the Lower Hall at 7pm**  
***The Birds and the Bees* at 8pm**

*The Blyth Festival is pleased to make available two complimentary tickets to each municipality. Additional tickets may be purchased at the special sponsor rate of \$20 each.*

*Please share this invitation with your Council and municipal staff and RSVP by June 20 to Barb Black, Administrative Assistant at 519.357.3550 x21 or [bblack@northhuron.ca](mailto:bblack@northhuron.ca)*



### **THE BIRDS AND THE BEES**

By Mark Crawford  
Directed by Ann Hodges

*From the writer of 2014's runaway hit Stag and Doe, comes a raucous, hilarious new comedy with huge honeyed heart about love, lust, bee keeping, and the artificial insemination of turkeys.*





**THE CORPORATION OF THE TOWN OF PETROLIA**

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Canada N0N 1R0

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Fax: 519-882-3373  
[www.town.petrolia.on.ca](http://www.town.petrolia.on.ca)

**"Celebrating our Heritage. Investing in our Future"**

May 10, 2016

The Honourable Judy Foote  
Minister of Public Services and Procurement  
House of Commons  
Ottawa, Ontario K1A 0A6

RE: recent changes to Canada Post PO Box addressing

Dear Minister Foote,



On behalf of the Council of the Town of Petrolia I'm reaching out to you today as the Minister responsible for the Canada Post Corporation.

On April 22<sup>nd</sup> our offices along with many residents of our Town, a community of just over 5500 residents received a letter from Canada Post (enclosed) advising of an amendment to our mailing address and also how we would access our PO Box at the Petrolia Post Office.

We were advised through this letter that the changes as outlined would become effective May 16, 2016, this did not leave much notice time or time to have questions answered and an understanding gained.

While we are very receptive to change and in this case understanding of the necessity to make changes to a "Civic Address" system for a mailing address, as you can imagine our office has been met with many challenges and concern by our ratepayer, some of which we as a Municipal Administration also share concern of.

During the short period of time between the release of the notices and today's date our offices have fielded many telephone conversations and counter visits with ratepayers expressing their concerns, a selection of the concerns being voiced to us, and also of concern from administration are:

- Lack of notice from Canada Post;
- No public session with residents by Canada Post to explain the proposed changes;
- Canada Post only as recent as the day before the notice was issued, advised residents that did not have PO Box number indicated on a piece of mail, that they are to be sure this is included or risk mail not reaching them;
- Lacking of understanding why a new box number must be assigned, if PO Box numbers are to be no longer part of the mailing address, that is fine, but there is no need for a new Box;
- While there will be a one year grace period provided by Canada Post in which mail still addressed to the original PO Box will be delivered, to enable sufficient time to provide the sender with updated address information, for some this notification change is a major inconvenience;



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- Many residents have been known by only their PO Box for decades;
- Business that operate from a home, but have PO Box for mail purposes to be able to separate home from work will no longer be able to;
- Business' have letterhead, envelopes and cheques that reflect a PO Box number, if they had received more than a few weeks' notice this change was coming, efforts could have been taken not to order these items with a PO Box reflective – the cost to replace and re-order these items is significant to business'.
- The cost to change letter head, envelopes and other items will be very costly;
- Suppliers will have to be contacted to change the address they use for the Town. We have over 2,000 suppliers;
- For Municipal property taxes bills sent out, we will have to remove the Post Office Box numbers and ensure the correct street address is inputted to our financial system. We have over 2,300 accounts. We will also have to ensure that this information is accurately provided to the Municipal Property Assessment Corporation as they update our property tax information annually and also send out documentation to Petrolia residents on a regular basis. This process will be an extreme administrative burden;
- For the Municipal Administration accounts receivable we will have to update their addresses., creating a burden to staff;
- The new mail box at the local Post Office has changed from a large one to a very small one. Our mail will not physically fit;
- The Victoria Playhouse Petrolia (an entity of the Municipality) has a mail data base of 30,000 patron, many of these addresses will be incorrect, and when notification is received of the updates the staff time to amend the address will be significant;
- Patrons of the Victoria Playhouse Petrolia are largely of an elderly demographic and purchase tickets by mailing in their payment and request, and mail only to the PO Box as they've been instructed to for year, should this mail be returned to them, most are not likely to attempt to find an alternate solution and sales impacts to the theatre could be effected;
- The Oil Heritage Community Centre (an entity of the Municipality) will also have an administrative burden to not only provide updated information but also amend current member records;

While these are only a small sampling of the feedback we are receiving from our residents and ratepayers it paints the picture of concern, legitimate concern with the way changes to the mailing addresses have occurred.



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**"Celebrating our Heritage. Investing in our Future"**

We have had several residents including one Town Councillor reach out Canada Post for clarification and to express concern and they unfortunately have not received a response.

As the letter is signed the Petrolia Post Office, and even advises the local post office phone number to express concern to. This has created some concern at our local post office as many residents are believing this to be a change at the local level and not on a Federal level.

We could continue to outline expressed concern and frustration, but that would become too lengthy, and while it is understood why the change is likely to be more beneficial than not, it is the process in which the change was outlined that is the biggest concern to us;

It would have made a tremendous difference to how this change was received if Canada Post had implemented some proactive items such as holding a public session with the community, possibly creating a video clip message on the Canada Post webpage that explains the changes and reasoning that the post office could direct concerned ratepayers to, and even if we the Municipality had received some advance notice of the changes we would have happily created a small marketing campaign specific to our ratepayers to help them understand and ease into the change.

During our recent regular meeting of Town Council on May 9<sup>th</sup> a report outlining these concerns, and concerns of our residents as expressed to us was brought forward to Council and the following motion passed:

MOVED: Joel Field

SECONDED: Liz Welsh

**"THAT the Council of the Town of Petrolia adopt the report the Deputy Clerk/Operations Clerk dated May 9, 2016 regarding Canada Post – PO Box changes ;**

**AND THAT the Council of the Town of Petrolia support staff addressing a letter to the Honorable Judy M Foote, Minister of Public Services and Procurement expressing concern for the implemented changes to the PO Box system with Canada Post and the way in which the changes were rolled out;**  
**AND THAT the financial and administrative burden these implemented changes will create are identified in the letter;**

**AND THAT the letter of concern be forwarded to all Municipalities in the Province of Ontario"**

**Carried**

C -09-05-09/2016

We have as staff reached out direct to Canada Post, and understand that they are willing to meet with us to review our areas of concern, a response that while appreciated, unfortunately as an after effect does not assist us with the current situation.





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We anticipate that this meeting should be quite positive and possibly resolve a few concerns, however as some areas are too late for our community we hope that by bringing this information and concern to your attention other Municipalities may not have a similar experience as we have.

Your time and review of our letter is much appreciated, thank you.

Yours truly,

Mandi Pearson  
Deputy Clerk/Operations Clerk

Encl.

cc: Manny Baron, CAO  
Municipalities of Ontario via email



CANADA POST  
4129 PETROLIA ST  
PETROLIA ON N0N 1R0

POSTES CANADA  
4129 RUE PETROLIA  
PETROLIA ON N0N 1R0

April 22, 2016

CANADA POST CUSTOMER  
PO BOX 1270  
PETROLIA ON N0N 1R0

## Important Notice about Your Postal Service

Dear customer,

At the Petrolia Post Office, we are making some modifications to the way we sort and deliver mail to our PO Box customers so that we can continue to provide customers with the efficient and reliable service they expect.

Postal Box customers will no longer be required to include their PO Box number in their mailing address. We ask that you please start using your municipal (9-1-1) address as your mailing address.

Your new mailing address is:

**411 GREENFIELD ST  
PETROLIA ON N0N 1R0**

It will take effect on **May 16, 2016**.

As of this date, please inform the businesses and individuals that send you mail and parcels of your new mailing address so that they can update their address records. To assist you with this change, a supply of **Change of Address cards** are available for pick up at the post office which you can fill out and send to you mailers, free of charge.

While you notify your mailers of your new mailing address, Canada Post will provide free Mail Forwarding service for 1 year starting on May 16<sup>th</sup>, 2016. This will ensure that none of your mail or parcels are misdelivered or returned to sender during or after the transition.

Due to the address change, it will also be necessary to assign you a new postal box number. **Please find enclosed keys to your new postal box.**

Any mail remaining in your current postal box by 5:00 PM on Friday, May 13<sup>th</sup> will be made available for pick up at the counter on the following Monday, May 16<sup>th</sup>. Please bring government-issued photo-identification when picking up your mail at the counter.

Thank you for your cooperation. We are committed to providing you with the best service possible. Should you require additional information, please contact the Petrolia Post office at (519) 882-0351.

Sincerely,

The Petrolia Post Office





TOWN OF SHELburnE  
COUNCIL RESOLUTION

No. 10

Date: May 9, 2016

Moved by: Wade Mills

Seconded by: Dan Sample



**WHEREAS**, Autism Spectrum Disorder is now recognized as the most common neurological disorder affecting 1 in every 94 children, as well as their friends, family and community; and

**WHEREAS**, Applied Behaviour Analysis (ABA) is the scientific process based on objective evaluation and empirically based interventions used to achieve meaningful, generalizable and enduring behavioural change. Intensive Behavioural Intervention (IBI) is an application of the principles of ABA in an intensive setting used to affect behaviour change and improvement; and

**WHEREAS**, the current waiting list of children for Intensive Behaviour Intervention (IBI) is over 2,000 and more than 13,000 children await Applied Behaviour Analysis (ABA); and

**WHEREAS**, the Province of Ontario has announced it intends to discontinue IBI services to children over the age of four and provide a one-time payment to assist with services, thereby abandoning thousands who have been wait-listed for years; and

**WHEREAS**, there are two service models for affected children to be treated, 1) the Direct Service Offering (DSO) where children receive services directly from trained staff at Ontario's nine regional service providers, and 2) the Direct Funding Offering (DFO) where parents receive funding directly in order to purchase services; and

**WHEREAS**, the DFO model to provide services is used in Alberta, British Columbia and imminently Saskatchewan. Such a model is clinically rigorous and has been identified by the Auditor General of Ontario as being less expensive than Ontario's DSO model;

**THEREFORE**, be it resolved that a letter be sent to Hon. Tracy MacCharles, Minister of Children and Youth Services; Alexander Bezzina, Deputy Minister; Hon. Eric Hoskins, Minister of Health; and Hon. Kathleen Wynne, Premier of Ontario, requesting the Province to:

1. Amend its policy to one that will allow all children on the current waiting list to receive the IBI services promised them; and
2. Remove the age limit for IBI therapy and replace it with a program that provides ongoing IBI services based on need and individual development, not age; and
3. Ensure oversight by professionals and parents based on 'development progress' criteria and milestones; and
4. Adopt a Direct Funding Offering (DFO) model in lieu of the current Direct Service Offering (DSO) model;

**AND FURTHER THAT** a copy of this resolution be forwarded to all municipalities within the Province of Ontario.

CARRIED: K. Bennington

Requested Vote to be recorded

[ X ] Yes

[ ] No

Mayor Bennington  
Councillor Benotto  
Councillor Chambers  
Deputy Mayor Dunlop  
Councillor Egan  
Councillor Mills  
Councillor Sample

Yea	Nay
[ X ]	[ ]
[ X ]	[ ]
[ Absent ]	[ ]
[ X ]	[ ]
[ Absent ]	[ ]
[ X ]	[ ]
[ X ]	[ ]



*Naturally Spirited*

1 John Street, P.O. Box 39  
Killaloe, ON K0J 2A0  
Telephone: (613)757-2300 – Fax: (613)757-3634  
Email: [info@khrtownship.ca](mailto:info@khrtownship.ca)  
Web Site: [killaloe-hagarty-richards.ca](http://killaloe-hagarty-richards.ca)

May 12, 2016

I.G.#

6

**To: All Municipalities in Ontario**

As we are all aware, Fort McMurray in northern Alberta is starting its recovery from the destruction left by the wildfires that destroyed homes and businesses last week. More than 88,000 people had to leave their homes in and around Fort McMurray. Many have lost everything in the fire, and many don't know whether they have a home to go back to.

The Township of Killaloe, Hagarty and Richards has made a \$200 donation to the Red Cross Alberta Fire Appeal, and challenges all municipalities in Ontario to help the residents of Fort McMurray by matching or bettering this donation. The federal government and the Alberta government will match individual donations made to the Canadian Red Cross to help those affected by the fire, so your contribution will make a tremendous difference.

Sincerely

Lorna Hudder, CMO, Dipl.M.M.  
CAO/Clerk-Treasurer

LMH

**TOWNSHIP OF WELLINGTON NORTH**  
**Regular Meeting of Council**

MOVED BY:

DATE: May 16, 2016

SECONDED BY:

RES. NO.: 2016- 235

**WHEREAS** the province has implemented a ban on door-to-door sales for electricity and natural gas contracts by passing the Strengthening Consumer Protection and Electricity System Oversight Act, 2015;

**AND WHEREAS** Ontarians over the last twelve months continue to experience unsolicited, aggressive and misleading sales tactics at their door from companies seeking to sell home energy products, despite this provincial legislation;

**AND WHEREAS** the door to door agents acting on behalf of these companies misrepresent their purpose and/or identity, often posing as utility inspectors and government agents needing to gain access to the homes of Ontarians;

**AND WHEREAS** people across Ontario, and in particular vulnerable Wellington North residents, have been targeted by these door to door misrepresentations and misleading sales tactics;

**BE IT RESOLVED THAT** the that Council of the Township of Wellington North move to:

1. Urge the Provincial Government to ban all door-to-door sales in the home services sector (more specifically the sale or lease of HVAC equipment, water heaters, water filtration systems and other related home energy products and services by door-to-door sales agents) as soon as possible;
2. Forward a copy of this resolution to all municipalities in Ontario asking for support by passing a similar resolution and forwarding to their MPP;
3. Forward a copy of this resolution to MPP Ted Arnott and MPP Randy Pettapiece.
4. Forward a copy of this resolution to the Ontario Legislature.

MAYOR



CARRIED



DEFEATED

I.G.#

7

**Meeting: Accessibility Advisory Committee (AAC)**

**Location: Elora Library**

**Date: May 5, 2016**

**Time: 1:30pm**

I.G.#

8

**PRESENT:** Warden George Bridge, Councillor Pierre Brianceau, Irene Van Eenoo, Nancy Oliver-Hawkrigg, Walt Visser, Matthew Bulmer, Mark MacKenzie, Bob Pearson, Kristen Horne, Morgan Struyk, Donna McMurdo

**ABSENT:** Andrea Lawson, Susan Farrelly, Councillor Kelly Linton, Michele Richardson, Nancy Dietrich

Item #	Description
1	Call to Order
2	<p><b>Adoption of Previous Minutes</b></p> <p>Moved by Bob Pearson Seconded by Pierre Brianceau That the minutes of February 4, 2016 be adopted as circulated.</p> <p>CARRIED</p>
3	<p><b>AAC Membership</b></p> <p>3.1 New Members</p> <ul style="list-style-type: none"><li>• Morgan Struyk joins the AAC</li><li>• Kristen Horne leaves the AAC</li></ul>
4	<p><b>Old Business</b></p> <p><b>4.1 Zoning and Long Term Care Homes</b></p> <p>Due to changes the province made a few years ago for long term care facilities this has been an on-going matter to ensure that long term care facilities get the same zoning protection as we would in our own home. Matthew asked for this to be put on hold until further notice because the Planning department is very busy at this time.</p>

**4.2 Facility Accessibility Design Manual (FADM) Update**

Kristen worked with the FADM consultants and some changes have been suggested, the next step is for Morgan to review the changes and see if they need to be adopted into the FADM, once finalized it will be taken to council. Bob asked if the FADM had been adopted by lower tier municipalities and Kristen confirmed that yes the original FADM has been adopted by lower tiers and we will encourage lower tiers to adopt the new FADM once it has been completed and approved by council. Matthew asked if a separate document should be created to outline the minimum provincial regulatory requirements in the event that the FADM exceeds a building budget; Morgan will look into this inquiry.

**4.3 Mount Forest Sports Complex Accessibility Issue Update**

The Sports Complex does not have inside automatic doors, which can create a barrier for some people who use the building. Mark said that the matter will be considered in next year's budget.

**4.4 Accessibility Requirements under the Building Code**

Kristen sent a summary of Accessibility requirements under the Building Code to committee members before the meeting and no one had questions regarding the Building Code. Bob raised a concern about Architect's that are selected for projects; are they competent and familiar with building code requirements? The Warden ensured the committee that when Minto and The County of Wellington select architects and/ or builders for projects that those selected meet building code and AODA building requirements.

**4.5 Harriston Library Elevator**

The Harriston Library elevator buttons caused a barrier for people with low vision; the buttons were difficult to navigate. Kristen informed the committee that the buttons have been fixed to be more accessible, Chad added rubber rings around each button.

**4.6 StopGap Update**

Matthew and Irene provided an update on the StopGap program; Matthew said that he had been talking to local businesses and all are eager to participate in the StopGap program. Matthew wanted the committee to endorse StopGap to receive CIP funding, a motion was called and all committee members were in favour of endorsing the idea. The Warden mentioned that CIP has been expanded to include more than just downtown areas. The Warden suggested to have StopGap come to the next Council meeting to give a presentation and have politicians present. The Warden and Matthew will take the StopGap program to the Economic Development group and suggest a presentation at the Council meeting in June.

	<p><b>4.7 Blindsquare and iBeacons</b></p> <p>Matthew summarized the Blindsquare and iBeacons program to the committee. Kristen researched and found that the Sanderson Centre for Performing Arts in Brantford is the first performing arts centre in the world to implement this program; the centre was looking to launch the program publicly as of March 1<sup>st</sup>. Kristen mentioned that perhaps a test of this program could be set up at one of the County Libraries. The contact at the Sanderson Centre told Kristen that a visit could be arranged; Morgan will get in contact with the Sanderson Centre for Performing Arts to schedule a visit to see the program in action with Matthew and other interested parties.</p>
<b>5</b>	<p><b>New Business</b></p> <p><b>5.1 Highlight Storefront Steps</b></p> <p>Mark raised the concern that a few years ago all of the storefront steps in Mount Forest had been highlighted and that it is now wearing off, Mark wanted to know if this is a requirement and should it be done again. The Warden and Mark will bring up the highlighting of storefront steps at the next Council meeting.</p> <p><b>5.2 Accessibility Fund</b></p> <p>The committee requested to have the Accessibility Fund information circulated; Morgan will send out this information before the next meeting.</p>
<b>6</b>	<p><b>Next Meeting: September 1, 2016 at 1:30 pm, Elora Library</b></p>





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Protecting the Natural  
Environment from  
Lake to Escarpment

May 2016

Ms Karen Landry  
CAO/Clerk  
Township of Puslinch  
RR #3  
Guelph ON N1H 6H9

Dear Ms Landry:

Enclosed please find a copy of the 2015 Audited Financial Statements for Conservation Halton as approved by the Conservation Halton Board of Directors on April 28, 2016.

Yours truly

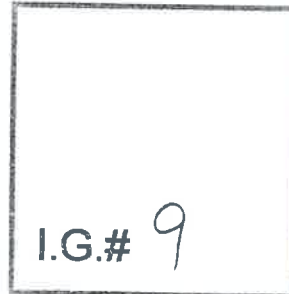
Marnie J. Piggot  
Director, Financial & Administrative Services

Encl. (1)

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MAY 13 2016

Township of Puslinch



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Council Agenda	June 1, 2016
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Financial Statements of

## **CONSERVATION HALTON**

Year ended December 31, 2015

# CONSERVATION HALTON

## Financial Statements

Year ended December 31, 2015

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### Independent Auditors' Report

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**KPMG LLP**  
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## INDEPENDENT AUDITORS' REPORT

To the Directors of Conservation Halton

We have audited the accompanying financial statements of Conservation Halton ("the Entity") which comprise the statement of financial position as at December 31, 2015 and the statements of operations and change in accumulated surplus, changes in net financial assets and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

### *Management's Responsibility for the Financial Statements*

Management is responsible for the preparation and fair presentation of these 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.

### *Auditors' Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform an audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Entity's preparation and fair presentation of the financial statements 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. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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



Page 2

*Opinion*

In our opinion, the financial statements present fairly, in all material respects, the financial position of Conservation Halton as at December 31, 2015, and its consolidated results of operations and the changes in net financial assets and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

*KPMG LLP*

Chartered Professional Accountants, Licensed Public Accountants

April 29, 2016

Waterloo, Canada

# CONSERVATION HALTON



## Statement of Financial Position

December 31, 2015, with comparative information for 2014

	2015	2014
<b>Financial assets:</b>		
Cash	\$ 741,061	\$ 518,263
Short-term investments (note 2)	10,014,160	11,290,700
Investment - Water Management System (note 3)	7,816,850	6,449,060
Accounts receivable (note 4)	928,165	830,376
	<u>19,500,236</u>	<u>19,088,399</u>
<b>Financial liabilities:</b>		
Accounts payable and accrued charges	1,945,753	1,862,480
Vacation pay and accumulated time entitlements	160,790	189,635
Deferred revenue (note 5)	5,625,059	6,336,682
Deferred revenue - capital and major projects (note 6)	503,284	854,125
Deferred revenue - Water Management System (note 3)	7,816,850	6,449,060
Long-term liabilities (note 7)	2,512,072	1,216,911
	<u>18,563,808</u>	<u>16,908,893</u>
<b>Net financial assets</b>	<b>936,428</b>	<b>2,179,506</b>
<b>Non-financial assets:</b>		
Tangible capital assets (note 8)	64,746,192	63,091,006
Prepaid expenses	379,418	396,214
Inventory	151,094	107,074
	<u>65,276,704</u>	<u>63,594,294</u>
<b>Commitments (note 13)</b>		
<b>Accumulated surplus (note 9)</b>	<b>\$ 66,213,132</b>	<b>\$ 65,773,800</b>

See accompanying notes to financial statements.

On behalf of the Board:

 Chair  
 Vice-Chair

# CONSERVATION HALTON

## Statement of Operations and Change in Accumulated Surplus

Year ended December 31, 2015, with comparative information for 2014

	2015 Budget	2015 Actual	2014 Actual
Revenue:			
Municipal grants - operating	\$ 7,989,189	\$ 7,989,189	\$ 7,653,647
Ministry of Natural Resources, transfer payments	285,311	300,311	300,311
User fees and sales:			
Management/protection of public assets	403,600	476,131	662,152
Communications	-	20,909	19,325
Watershed environmental services	2,060,704	2,462,989	1,750,776
Conservation areas	10,653,250	11,185,507	11,462,865
Corporate services	87,594	79,701	103,800
Special programs and projects	172,000	945,119	631,535
Source water protection	348,956	456,813	450,856
Major projects	995,500	1,233,998	2,819,646
Total revenue	22,996,104	25,150,667	25,854,913
Expenses:			
Management/protection of public assets	4,306,429	4,252,224	4,315,125
Communications	804,729	813,987	815,249
Watershed environmental services	3,569,435	3,940,753	2,848,685
Conservation areas	9,638,588	10,404,613	10,019,438
Corporate services	3,216,416	3,244,105	3,052,863
Special programs and projects	172,000	743,496	586,435
Source water protection	362,956	470,421	462,308
Major projects	530,000	772,492	689,657
Debt financing charges	88,810	69,244	56,793
Total expenses	22,689,363	24,711,335	22,846,553
Annual surplus (note 9)	306,741	439,332	3,008,360
Accumulated surplus, beginning of year		65,773,800	62,765,440
Accumulated surplus, end of year		\$ 66,213,132	\$ 65,773,800

See accompanying notes to financial statements.

# CONSERVATION HALTON

## Statement of Changes in Net Financial Assets

Year ended December 31, 2015, with comparative information for 2014

	2015 Budget	2015 Actual	2014 Actual
Annual surplus	\$ 306,741	\$ 439,332	\$ 3,008,360
Acquisition of tangible capital assets	(3,823,000)	(3,333,260)	(3,851,943)
Amortization of tangible capital assets	1,627,000	1,625,861	1,570,124
Proceeds on disposal of tangible capital assets	-	49,110	21,399
Loss on disposal of tangible capital assets	-	3,103	50,364
	(1,889,259)	(1,215,854)	798,304
Change in prepaid expenses	-	16,796	(152,799)
Change in inventories	-	(44,020)	(22,352)
Net change in net financial assets	(1,889,259)	(1,243,078)	623,153
Net financial assets, beginning of year	2,179,506	2,179,506	1,556,353
Net financial assets, end of year	\$ 290,247	\$ 936,428	\$ 2,179,506

See accompanying notes to financial statements.



# CONSERVATION HALTON

## Statement of Cash Flows

Year ended December 31, 2015, with comparative information for 2014

	2015	2014
Cash provided by (used in):		
Operating activities:		
Annual surplus	\$ 439,332	\$ 3,008,360
Items not involving cash:		
Amortization	1,625,861	1,570,124
Loss on disposal of tangible capital assets	3,103	50,364
	2,068,296	4,628,848
Change in non-cash working capital balances:		
Accounts receivable	(97,789)	(105,169)
Prepaid expenses	16,796	(152,799)
Inventory	(44,020)	(22,352)
Accounts payable and accrued charges	83,273	479,981
Vacation pay and accumulated time entitlements	(28,845)	31,907
Deferred revenue	(711,623)	1,185,615
Deferred revenue - capital and major projects	(350,841)	(26,623)
	935,247	6,019,408
Capital transactions:		
Acquisition of tangible capital assets	(3,333,260)	(3,851,943)
Proceeds on disposal of tangible capital assets	49,110	21,399
	(3,284,150)	(3,830,544)
Investing activities:		
Investment - Water Management System	(1,104,498)	(1,104,498)
Investment revenue - Water Management System	(263,292)	(230,802)
	(1,367,790)	(1,335,300)
Financing transactions:		
Deferred revenue - Water Management System	1,367,789	1,335,300
Proceeds from long-term debt	1,555,197	136,900
Repayment of long-term debt	(260,035)	(206,399)
	2,662,951	1,265,801
Net change in cash and cash equivalents	(1,053,742)	2,119,365
Cash and short-term investments, beginning of year	11,808,963	9,689,598
Cash and short-term investments, end of year	\$ 10,755,221	\$ 11,808,963
Compromised of:		
Cash	\$ 741,061	\$ 518,263
Short-term investments	10,014,160	11,290,700
	\$ 10,755,221	\$ 11,808,963
Supplemental cash flow information:		
Investment revenue	\$ 184,741	\$ 126,013

See accompanying notes to financial statements.

# CONSERVATION HALTON

## Notes to Financial Statements

Year ended December 31, 2015

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### **Purpose of Organization:**

Conservation Halton is established under the Conservation Authorities Act of Ontario to further the conservation, restoration, development and management of natural resources, exclusive of gas, oil, coal and minerals for the watersheds within its area of jurisdiction. The watersheds include areas in the Regions of Halton and Peel, the Township of Puslinch and the City of Hamilton.

Conservation Halton's mission is to protect and enhance the natural environment from lake to escarpment for present and future generations.

### **1. Significant accounting policies:**

#### **(a) Basis of accounting:**

The financial statements of Conservation Halton are prepared by management in accordance with the Chartered Professional Accountants of Canada Public Sector Accounting Handbook for local government.

Revenues and expenses are reported on the accrual basis of accounting. The accrual basis of accounting recognizes revenues as they become available and measureable; expenses are recognized as they are incurred and measureable as a result of receipt of goods or services and the creation of a legal obligation to pay.

These financial statements do not include the activities of the Conservation Halton Foundation, a related incorporated registered charity with a mission to raise funds and profile for Conservation Halton projects and programs.

#### **(b) Short-term investments and investments - Water Management System:**

Short-term investments and investments - water management system are recorded at the lower of cost and market value based on quoted market prices. Losses are recorded when the decline in market value is other than temporary.

#### **(c) Tangible capital assets:**

Tangible capital assets are recorded at cost less accumulated amortization. Costs include all amounts that are directly attributable to acquisition or construction of the tangible capital asset including transportation costs, installation costs, design and engineering fees, legal fees and site preparation costs. Contributed tangible capital assets are recorded at fair value at the time of the donation, with a corresponding amount recorded as revenue on the same basis as the amortization expense related to the acquired tangible capital assets. Assets under construction are not amortized and are transferred into their relative asset category when available for productive use. Amortization is recorded on either a straight-line basis over the estimated life of the assets or by using the declining balance method.

# CONSERVATION HALTON

Notes to Financial Statements, continued

Year ended December 31, 2015

## 1. Significant accounting policies (continued):

### (c) Tangible capital assets (continued):

The following rates are used:

Asset	Basis	Useful Life - Years
Land improvements	Straight-line	30 to 50 years
Buildings and building improvements	Straight-line	25 to 50 years
Machinery and equipment	Straight-line	5 to 40 years
Furniture and fixtures	Straight-line	5 to 20 years
Infrastructure	Straight-line	20 to 75 years
Vehicles	Declining balance	30%
Computer hardware and software	Straight-line	5 to 10 years

### (d) Reserves:

Reserves for future expenses and contingencies are established as required using the estimates of management. Increases or decreases in these reserves are made by appropriations to or from operations.

### (e) Inventory:

Inventory is valued at the lower of cost and net realizable value. Cost is determined using specific identification of the cost of the individual items.

### (f) Deferred revenue - Capital and Major Projects:

Conservation Halton receives certain amounts for which the related services have yet to be performed. These amounts are recognized as revenue in the fiscal year the related expenses are incurred or services performed. Funds received for the purchase of tangible capital assets are recognized when the related asset is purchased.

### (g) Deferred revenue - Water Management System:

Conservation Halton is receiving funds for expenses to be incurred for the future operation of a water management system and management of certain lands. These funds are externally restricted and cannot be drawn until Conservation Halton commences management of the lands. These amounts will be recognized as revenues when the relating expenses are incurred or management services performed.

# CONSERVATION HALTON

Notes to Financial Statements, continued

Year ended December 31, 2015

---

## 1. Significant accounting policies (continued):

### (h) Revenue recognition:

Municipal levies, government transfers and funding for projects are recognized as revenue when the transfer is authorized, any eligible criteria has been met and the amount can be reasonably estimated.

User charges and fees are recognized as revenue in the period in which the related services are performed.

### (i) Use of estimates:

The presentation of financial statements in conformity with Canadian public sector accounting standards requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from management's best estimates as additional information becomes available in the future.

### (j) Adoption of new accounting standard:

Conservation Halton adopted Public Sector Accounting Board Standard *PS 3260 Liability for Contaminated Sites* effective April 1, 2014.

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.

A liability for remediation of contaminated sites is recognized, net of any expected recoveries, when all of the following criteria are met:

- (a) an environmental standard exists
- (b) contamination exceeds the environmental standard
- (c) the organization is directly responsible or accepts responsibility for the liability
- (d) future economic benefits will be given up, and
- (e) a reasonable estimate of the liability can be made

This Standard relates to sites that are not in productive use and sites in productive use where an unexpected event resulted in contamination. Conservation Halton adopted this standard on a retroactive basis and there were no adjustments as a result of the adoption of this standard.

# CONSERVATION HALTON

Notes to Financial Statements, continued

Year ended December 31, 2015

## 2. Short-term investments:

	2015	2014
Business investment account	\$ 1,239,656	\$ 2,605,319
Guaranteed investment certificates	4,500,000	4,500,000
Pooled funds	4,274,504	4,185,381
Total	\$ 10,014,160	\$ 11,290,700

The guaranteed investment certificates have effective rates of 1.15% to 1.55% (2014 - 1.25% to 1.50%). Interest is receivable on the date of maturity. Maturity dates range from March 31, 2016 to January 16, 2017. The business investment account and pooled funds (which include money market, bond and equity funds) earn interest at variable rates which is paid monthly.

## 3. Investment/Deferred revenue - Water Management System:

Conservation Halton entered into an agreement for the transfer of a Water Management System and its long-term operation with an estimated time line of 2063. The agreement is based on the principle that the net costs associated with ongoing operation, maintenance and performance of the Water Management System will not be a financial liability to Conservation Halton.

To ensure that Conservation Halton should not have a net financial liability for the management of the water system, Conservation Halton will be receiving amounts from 2008 to 2017, as part of the agreement. The amounts received are to be invested in accordance with Municipal Act Regulations and will be managed by an Investment Committee as required by the agreement. At the time of transfer, Conservation Halton will be able to draw on the funds, only to facilitate the management of the water system.

The funds are invested as follows:

	2015	2014
Cash	\$ 125	\$ 294
Provincial and provincially regulated agency bonds	5,577,393	5,337,507
Guaranteed investment certificates	2,239,332	1,111,259
Total	\$ 7,816,850	\$ 6,449,060

The Provincial and provincially regulated agency bonds have effective yields of 4.07% to 5% (2014 - 4.07% to 5.00%). Interest is receivable on the date of maturity. Maturity dates range from January 13, 2020 to July 16, 2028.

The guaranteed investment certificate has an effective interest rate of 1.45% (2014 - 1.33%). Interest is receivable on the date of maturity. Maturity dates range from November 14, 2016 to January 16, 2017.

# CONSERVATION HALTON

Notes to Financial Statements, continued

Year ended December 31, 2015

## 4. Accounts receivable:

Included in accounts receivable is \$139,983 (2014 - \$139,037) due from Conservation Halton Foundation.

## 5. Deferred revenue:

	Balance at December 31, 2015	Additions	Revenue recognized	Balance at December 31, 2014
Watershed Environmental Services	\$ 2,039,275	\$ 1,107,229	\$ 1,543,400	\$ 2,475,446
Special Programs and Projects	755,387	643,246	859,497	971,638
Source Water Protection	158,391	288,423	463,066	333,034
Glen Eden	2,672,006	6,539,503	6,424,061	2,556,564
	<u>\$ 5,625,059</u>	<u>\$ 8,578,401</u>	<u>\$ 9,290,024</u>	<u>\$ 6,336,682</u>

Additions to deferred revenue includes contributions from external parties and payments for annual passes and lesson programs received during the year pertaining to the following year.

## 6. Deferred revenue - capital and major projects:

	Balance at December 31, 2015	Contributions received	Revenue recognized	Balance at December 31, 2014
Capital - Ministry of Natural Resources	\$ -	\$ 200,817	\$ 514,214	\$ 313,397
Capital - Municipal	503,284	291,500	328,944	540,728
	<u>\$ 503,284</u>	<u>\$ 492,317</u>	<u>\$ 843,158</u>	<u>\$ 854,125</u>

# CONSERVATION HALTON

Notes to Financial Statements, continued

Year ended December 31, 2015

## 7. Long-term liabilities:

	2015	2014
5 year term loan at 3.5%, interest only payable during the first 36 months with a registered collateral mortgage covering 54.36 acres of land, due December 2020	\$ 858,000	\$ -
Municipal debt financing and interest payments due annually at variable current interest rates 3.98% (2014 - 4.17%) and annual principal repayments due December 2025	1,654,072	1,216,911
	<u>\$ 2,512,072</u>	<u>\$ 1,216,911</u>

Principal repayments over the next five fiscal years and thereafter are as follows:

2016	\$ 277,464
2017	273,115
2018	263,559
2019	252,930
2020	187,705
Thereafter	1,257,299
	<u>\$ 2,512,072</u>

# CONSERVATION HALTON

Notes to Consolidated Financial Statements (continued)

Year ended December 31, 2015

## 8. Tangible capital assets:

2015	Land	Land Improvements	Buildings and building improvements	Machinery and equipment	Furniture and fixtures	Infrastructure	Vehicles	Computer hardware and software	Assets under construction	Total
Cost, beginning of year	\$ 34,266,814	\$ 567,184	\$ 13,166,528	\$ 7,887,047	\$ 424,339	\$ 23,838,750	\$ 2,293,774	\$ 1,173,496	\$ 236,913	\$ 83,854,845
Additions	881,972	-	572,255	265,885	43,731	802,911	293,992	150,760	321,754	3,333,260
Disposals	-	(2,378)	(12,000)	(167,015)	-	(117,789)	(148,007)	(83,617)	-	(530,806)
Transfers	3,419	-	88,138	-	-	-	-	-	(91,557)	-
Cost, end of year	35,152,205	564,806	13,814,921	7,985,917	468,070	24,523,872	2,439,759	1,240,639	467,110	86,657,299
Accumulated amortization, beginning of year	-	274,167	3,693,223	3,370,064	169,570	10,979,728	1,545,807	731,280	-	20,763,839
Amortization	-	12,714	326,602	371,105	20,374	535,482	231,828	127,756	-	1,625,861
Disposals	-	(2,378)	(6,960)	(155,325)	-	(117,789)	(125,195)	(70,946)	-	(478,593)
Accumulated amortization, end of year	-	284,503	4,012,865	3,585,844	189,944	11,397,421	1,652,440	788,090	-	21,911,107
Net carrying amount, end of year	\$ 35,152,205	\$ 280,303	\$ 9,802,056	\$ 4,400,073	\$ 278,126	\$ 13,126,451	\$ 787,319	\$ 452,549	\$ 467,110	\$ 64,746,192



# CONSERVATION HALTON

Notes to Consolidated Financial Statements (continued)

Year ended December 31, 2014

## 8. Tangible capital assets (continued):

2014	Land	Land improvements	Buildings and building improvements	Machinery and equipment	Furniture and fixtures	Infrastructure	Vehicles	Computer hardware and software	Assets under construction	Total
Cost, beginning of year	\$ 32,647,989	\$ 567,184	\$ 11,706,662	\$ 7,803,958	\$ 344,997	\$ 23,172,122	\$ 2,216,999	\$ 1,134,775	\$ 810,021	\$ 80,404,707
Additions	1,640,417	-	797,328	229,002	79,342	747,300	123,999	112,020	122,535	3,851,943
Disposals	(30,553)	-	-	(170,057)	-	(80,672)	(47,224)	(73,299)	-	(401,805)
Transfers	8,961	-	662,538	24,144	-	-	-	-	(695,643)	-
Cost, end of year	34,266,814	567,184	13,166,528	7,887,047	424,339	23,838,750	2,293,744	1,173,496	236,913	83,854,845
Accumulated amortization, beginning of year	-	261,453	3,394,076	3,134,955	151,760	10,605,790	1,317,661	658,062	-	19,523,757
Amortization	-	12,714	299,147	402,940	17,810	444,978	260,105	132,430	-	1,570,124
Disposals	-	-	-	(167,831)	-	(71,040)	(31,959)	(59,212)	-	(330,042)
Accumulated amortization, end of year	-	274,167	3,693,223	3,370,064	169,570	10,979,728	1,545,807	731,280	-	20,763,839
Net carrying amount, end of year	\$ 34,226,814	\$ 293,017	\$ 9,473,306	\$ 4,516,983	\$ 254,769	\$ 12,859,022	\$ 747,967	\$ 442,216	\$ 236,913	\$ 63,091,006

# CONSERVATION HALTON

Notes to Consolidated Financial Statements (continued)

Year ended December 31, 2015

## 9. Accumulated surplus:

Accumulated surplus consists of operating surplus and reserves as follows:

	Balance at December 31, 2015	Excess of Revenue over expenses	Transfers (to) from reserves	Balance at December 31, 2014
Surplus - investment in tangible capital assets	\$ 64,746,195	\$ (1,678,074)	\$ 3,333,260	\$ 63,091,009
Surplus (deficit) - current funds	(3,366,192)	2,117,406	(3,390,501)	(2,093,097)
Total surplus	61,380,003	439,332	(57,241)	60,997,912
Reserves				
Conservation areas capital projects	2,078,447	-	(58,443)	2,136,890
Conservation areas stabilization	640,168	-	10,000	630,168
Vehicle, equipment and building	715,900	-	(31,292)	747,192
Watershed management capital projects				
- municipal funds	119,875	-	26,700	93,175
Watershed management capital projects				
- self generated funds	280,811	-	14,500	266,311
Watershed management stabilization	263,035	-	23,035	240,000
Capital Projects				
- debt financing charges	183,991	-	(123,100)	307,091
Legal	209,791	-	3,300	206,491
Community outreach	214,111	-	190,541	23,570
Land and property	127,000	-	2,000	125,000
Total reserves	4,833,129	-	57,241	4,775,888
Accumulated surplus	\$ 66,213,132	\$ 439,332	\$ -	\$ 65,773,800

## 10. Pension agreements:

Conservation Halton belongs to the Ontario Municipal Employees Retirement Fund ("OMERS"), which is a multi-employer plan, on behalf of the members of its staff. This plan specifies the amount of the retirement benefit to be received by the employees based on the length of service and rates of pay. The cost of the plan is the employer's contribution to the plan.

The 2015 employer portion of OMERS pension contributions was \$980,996 (2014 - \$940,014).

# CONSERVATION HALTON

Notes to Consolidated Financial Statements (continued)

Year ended December 31, 2015

## 11. Budget amounts:

The 2014 budget amounts approved by Conservation Halton on October 25, 2013 were not prepared on a basis consistent with that used to report actual results under Public Sector Accounting Standards. The budget was prepared on a modified accrual basis while Public Sector Accounting Standards require a full accrual basis. The budget figures anticipated use of surpluses accumulated in previous years to reduce current year expenses in excess of current year revenues to \$nil. In addition, the budget expensed all tangible capital expenses rather than including amortization expenses. As a result, the budget figure presented in the statements of operations and changes in net financial assets represent the budget adopted by Conservation Halton on October 25, 2013, with adjustments as follows:

	2015 Actual	2014 Actual
Budget deficit for the year	\$ (1,494,189)	\$ (925,553)
Less: Amortization of tangible capital assets	(1,627,000)	(1,570,000)
Add: Acquisition of tangible capital assets	3,823,000	2,200,000
Add: Debt financing charges - principal portion	292,430	249,929
Less: Municipal debt financing	(687,500)	(425,000)
Budget surplus per Statement of Operations	\$ 306,741	\$ (470,624)

## 12. Contingencies:

Conservation Halton has been named as defendant or co-defendant in several lawsuits that have claims outstanding as at December 31, 2015. Conservation Halton anticipates any individual settlement amount will not exceed the limits of insurance coverage provided to Conservation Halton on the majority of the claims. For claims in which the claim amount exceeds the limit of insurance coverage provided to Conservation Halton the outcome is not determinable.

Conservation Halton has entered into an agreement to ensure implementation of a monitoring and mitigation plan for the future rehabilitation of lands adjacent to a Provincially Significant Wetland. The agreement requires a Trust account to be established by the funder to ensure there are funds available for the rehabilitation plan implementation. Conservation Halton will be a member of the Investment Committee that will oversee management of the Trust account. A deposit to the Trust account by the funder is required to be made by March 31, 2016 for \$94,936 which was completed. Conservation Halton will release their interest in the Trust account when the implementation plan is completed.

# CONSERVATION HALTON

Notes to Consolidated Financial Statements (continued)

Year ended December 31, 2015

## 13. Commitments:

Conservation Halton has entered into contracts related to projects at Glen Eden, various dam studies and repairs, and leases for office equipment and vehicles. Commitments outstanding on these contracts to be paid beyond December 31, 2015 are as follows:

2016	\$	544,330
2017		366,771
2018		56,193
2019		15,234
2020		3,809
Thereafter		-
	\$	986,337

## 14. Internal financial reporting:

For internal financial budget reporting purposes, administration chargebacks and contributions between internal programs are reported.

The chargebacks and contributions are not separately disclosed in the Schedules of the audited financial statements.

The internal chargebacks and contributions for 2014 are as follows:

	2015 Budget (note 11)	2015 Actual	2014 Actual
Administration chargebacks to:			
Watershed Experience:			
Glen Eden	\$ 588,000	\$ 559,600	\$ 585,100
Conservation Areas	384,100	419,495	380,730
Source Water Protection	9,594	8,175	8,982
Capital Contribution from Glen Eden to Conservation Areas	-	-	120,000
Total operating grants	\$ 981,694	\$ 987,270	\$ 1,094,812

## 15. Comparative figures:

Certain comparative figures on the statement of operations under revenue and expenses have been reclassified to conform with the financial statement presentation adopted in the current year.

# CONSERVATION HALTON

Notes to Financial Statements (continued)

Year ended December 31, 2015

## 16. Revenue and expenses by program:

2015	Management protection of public assets	Communications	Watershed environmental services	Conservation Areas	Corporate Services	Special programs and projects	Source water protection	Major projects	Debt financing charges	Reserve funding	Total
<b>Revenue:</b>											
Municipal levies	\$ 3,164,413	\$ 802,729	\$ 1,242,731	\$ 192,354	\$ 1,978,722	\$ -	\$ -	\$ 328,944	\$ 381,239	\$ 227,000	\$ 8,318,132
Provincial transfer payments	300,311	-	-	-	8,175	-	454,890	514,214	-	-	1,277,590
User fees, sales and other	476,132	20,909	2,462,989	11,185,507	71,526	945,119	1,923	390,840	-	-	15,554,945
	3,940,856	823,638	3,705,720	11,377,861	2,058,423	945,119	456,813	1,233,998	381,239	227,000	25,150,667
<b>Expenses:</b>											
Salaries, wages and benefits	2,844,757	644,367	3,298,207	6,461,903	2,508,457	173,894	430,702	302,976	-	-	16,665,263
Members per diems and expenses	-	-	-	-	26,903	-	-	-	-	-	26,903
Utilities, materials, supplies and maintenance	753,272	168,072	91,622	1,847,688	321,442	291,232	26,111	36,196	-	-	3,535,635
Property taxes	34,166	-	-	-	-	-	-	-	-	-	34,166
Purchased services	-	-	46,400	1,232,200	160,714	278,370	-	433,320	-	-	2,151,004
Legal	53,378	-	504,524	-	41,749	-	-	-	-	-	599,651
Minor capital	-	-	-	504	-	-	-	-	-	-	504
Debt financing charges	-	-	-	-	-	-	-	-	69,244	-	69,244
Amortization of tangible capital assets	592,630	1,548	-	840,286	177,790	-	13,608	-	-	-	1,625,862
Loss (gain) on disposal of tangible capital assets	(25,979)	-	-	22,032	7,050	-	-	-	-	-	3,103
	4,252,224	813,987	3,940,753	10,404,613	3,244,105	743,496	470,421	772,492	69,244	-	24,711,335
<b>Excess (deficiency) of revenues over expenses, for the year</b>											
	\$ (311,368)	\$ 9,651	\$ (235,033)	\$ 973,248	\$ (1,185,682)	\$ 201,623	\$ (13,608)	\$ 461,506	\$ 311,995	\$ 227,000	\$ 439,332

# CONSERVATION HALTON

Notes to Financial Statements (continued)

Year ended December 31, 2015

## 16. Revenue and expenses by program (continued):

2014	Management protection of public assets	Communications	Watershed environmental services	Conservation Areas	Corporate Services	Special programs and projects	Source water protection	Major projects	Debt financing charges	Reserve funding	Total
Revenue:											
Municipal levies	\$ 2,977,399	\$ 798,685	\$ 1,331,034	\$ 174,867	\$ 1,811,896	\$ -	\$ -	\$ 360,966	\$ 332,764	\$ 227,000	\$ 8,014,611
Provincial transfer payments	300,311	-	-	-	8,982	-	448,104	436,803	-	-	1,194,200
User fees, sales and other	662,154	19,325	1,750,776	11,462,865	94,818	631,535	2,752	2,021,877	-	-	16,646,102
	3,939,864	818,010	3,081,810	11,637,732	1,915,696	631,535	450,856	2,819,646	332,764	227,000	25,854,913
Expenses:											
Salaries, wages and benefits	2,540,172	636,717	2,623,470	6,119,077	2,268,053	78,318	411,120	235,178	-	-	14,912,105
Members per diems and expenses	-	-	-	-	24,408	-	-	-	-	-	24,408
Utilities, materials, supplies and maintenance	784,010	176,184	59,046	1,715,569	376,123	138,722	37,361	135,938	-	-	3,422,953
Property taxes	25,950	-	-	-	-	-	-	-	-	-	25,950
Purchased services	-	-	166,169	1,264,791	195,364	369,395	-	318,541	-	-	2,314,260
Legal	49,620	-	400,029	-	16,651	-	-	-	-	-	466,300
Vehicle and equipment leases	429	-	-	-	-	-	-	-	-	-	429
Minor capital	-	-	-	2,867	-	-	-	-	-	-	2,867
Debt financing charges	-	-	-	-	-	-	-	-	56,793	-	56,793
Amortization of tangible capital assets	489,111	2,348	-	901,592	163,246	-	13,827	-	-	-	1,570,124
Loss (gain) on disposal of tangible capital assets	25,804	-	-	15,542	9,018	-	-	-	-	-	50,364
	3,915,096	815,249	3,248,714	10,019,438	3,052,863	586,435	462,308	689,657	56,793	-	22,846,553
Excess (deficiency) of revenues over expenses, for the year	\$ 24,768	\$ 2,761	\$ (166,904)	\$ 1,618,294	\$ (1,137,167)	\$ 45,100	\$ (11,452)	\$ 2,129,989	\$ 275,971	\$ 227,000	\$ 3,008,360

**MAY 16 2016**

**TAKE NOTICE** that the Council of the Corporation of the Township of Guelph/Eramosa passed By-law No. 28/2016, on the 2<sup>nd</sup> day of May, 2016, under Section 34 of the *Planning Act*, R.S.O. Chapter P. 13, as amended.

**AND TAKE NOTICE** that the last date for filing a notice of appeal to the Ontario Municipal Board in respect of the by-law is the **2<sup>nd</sup> day of June, 2016**. A Notice of Appeal setting out the reasons for the appeal must be filed with the Clerk of the Township of Guelph/Eramosa and accompanied by the appropriate fee as required by the Ontario Municipal Board.

**NOTE:** Only individuals, corporations and public bodies may appeal a zoning by-law to the Ontario Municipal Board. A notice of appeal may not be filed by an unincorporated association or group. However, a notice of appeal may be filed in the name of an individual who is a member of the association or the group on its behalf.

No person or public body shall be added as a party to the hearing of the appeal unless, before the by-law was passed, the person or public body made oral submissions at a public meeting or written submissions to the council or, in the opinion of the Ontario Municipal Board, there are reasonable grounds to add the person or public body as a party.

**AN EXPLANATION** of the purpose and effect of the by-law and a key map showing a portion of the lands 6939 Wellington Road 124 (Part of Lots 14, 15 and 16, and Lots 17 and 18, Division B, former Township of Guelph, now the Township of Guelph/Eramosa) to which the by-law applies, is shown below. The complete by-law passed as By-law No. 28/2016 is available for inspection in the Clerk's Office located at 8348 Wellington Road 124 (at Brucedale), during regular business hours (8:30 a.m. to 4:30 p.m.).

#### **PURPOSE AND EFFECT**

By-law 28/2016 amends By-law 57/1999, being a Zoning By-law controlling land use development within the Township of Guelph/Eramosa. The purpose of the by-law is to rezone a portion of the lands from Agricultural (A) to Extractive Industrial (M3).

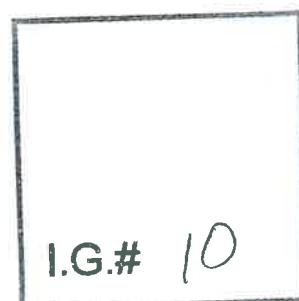
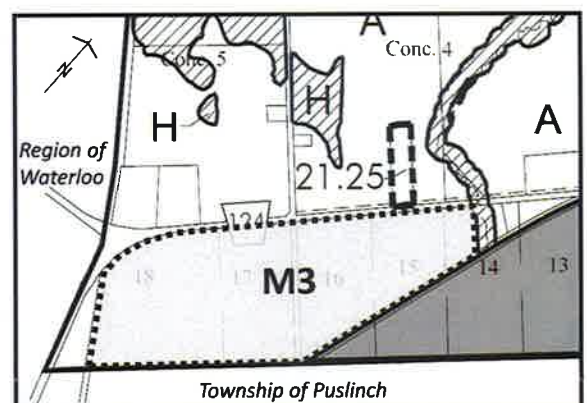
The complete by-law passed as By-law 28/2016 is available for inspection in the Clerk's Office located at 8348 Wellington Road 124 (at Brucedale), during regular business hours (8:30 a.m. to 4:30 p.m.).

**Dated** at the Township of Guelph/Eramosa,  
this 13<sup>th</sup> day of May, 2016.

Meaghen Reid, Clerk  
Township of Guelph/Eramosa  
8348 Wellington Road 124, P.O. Box 700  
Rockwood, Ontario N0B 2K0  
Telephone: (519) 856-9596 Ext. 107  
Fax: (519) 856-2240  
Email: mreid@get.on.ca

This document is available in larger font on the Township's website at [www.get.on.ca](http://www.get.on.ca). If you require an alternative format, please contact the Township Clerk.

#### **LOCATION AND ZONING**





## **REPORT ADM-2016-009**

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**TO:** Mayor and Members of Council

**FROM:** Karen Landry, CAO/Clerk

**MEETING DATE:** June 1, 2016

**SUBJECT:** John Hamilton – Request for Temporary Use of Lands – Storm Water Management Lands – Block 6, Plan 847  
Our File: L04HAM

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### **RECOMMENDATIONS**

That Report ADM-2016-009 regarding John Hamilton – Request for Temporary Use of Lands – Storm Water Management Lands – Block 6, Plan 847 be received; and

That should Council grant permission to John Hamilton for the use of the lands that Council enact a By-law to authorize the Mayor and Clerk to execute a Licence Agreement with John Hamilton for the purpose of permitting the use of Township lands as outlined in Report ADM-2016-009.

### **DISCUSSION**

#### **Background**

The Township is in receipt of a request from John Hamilton to use the lands legally described at Block 6, Plan 847 for training retrievers for hunt tests. A copy of John Hamilton's request is attached as Schedule "A" to this Report.

John Hamilton has advised the training of the retrievers encompasses the use of whistles, blank guns, pigeons, imitation ducks and bumpers.

#### **Purpose**

The purpose of this report is to consider the request by John Hamilton for the use of Township lands as identified in Schedule "B" to this Report.

John Hamilton is seeking the use of the lands from July 2, 2016 to November 30, 2016 on the following days and times (weather permitting):

- Tuesday, Wednesday and Thursday 10:00 a.m. to 1:00 p.m.
- Saturday 10:00 a.m. to 1:00 p.m.



Staff has consulted with John Hamilton to confirm the proposed use, location, dates and times regarding the request. A licence agreement has been prepared and the primary conditions of the agreement are:

**Licence Fee** – nominal consideration for the use of the lands (\$2.00). Note there is an agreement administration fee of \$500.00 in accordance with the Township's User Fee By-law.

**Termination** – upon 60 days' written notice

**Licensee's Covenants** – to maintain the Licensed Premises in a good state of repair and in a clean condition to the full satisfaction of the Township.

**Insurance** – John Hamilton is required to provide proof of liability insurance for the subject lands in the amount of \$2,000,000 naming the Township as an additional insured party.

The subject lands are zoned Industrial and contain the storm water management pond for the Aberfoyle Business Park.

It is recommended that should Council grant approval to the request that John Hamilton provide proof that he has notified the abutting property owners and the OPP of the activity taking place on the Licensed Premises.

## **FINANCIAL IMPLICATIONS**

In accordance with the Township's Fees By-law, a fee for the administration of the agreement is \$500.00.

## **APPLICABLE LEGISLATION AND REQUIREMENTS**

Municipal Act, 2001  
Fees By-law 2016-019

## **SCHEDULES**

Schedule A -	John Hamilton's Request dated April 7, 2016
Schedule B -	Aerial Photo outlining subject lands



james lindsay &lt;bushmillsgundogs@gmail.com&gt;

**letter to township**

1 message

james lindsay &lt;bushmillsgundogs@gmail.com&gt;

Thu, Apr 7, 2016 at 5:35 PM

To: "John Hamilton (valenciaretrievers@sympatico.ca)" &lt;valenciaretrievers@sympatico.ca&gt;

John F.Hamilton

To: Township of Puslinch

Re; Use of Wetlands Property  
McLean Rd east of Hwy.6

Dear Sir/Madam

I, John Hamilton, have been a property owner in Puslinch since 1969 and have lived in the Puslinch area since 1972. I have trained retrievers for field trials, hunt tests etc since 1954, and have been a C.K.C. judge for a considerable number of years.

It is my wish to be granted permission by the Township of Puslinch, to use the lands located on McLean Road (North side/opposite Go bus station) east of Hwy #6, also designated wetlands, for training retrievers for hunt tests etc. 3-4 times weekly.

I also carry a 2 million dollar liability insurance policy for damages and personal injury while training on the said property. The land will be kept in a reasonably clean condition and all participants and their dogs shall be responsible for cleaning up after themselves.

The occasional hunt test will be held on the said lands.

Sincerely,

John F. Hamilton  
April 7th, 2016

Schedule B



**THE CORPORATION OF THE TOWNSHIP OF PUSLINCH**

**BY-LAW NUMBER XX/16**

**BEING A BY-LAW TO AUTHORIZE THE ENTERING INTO OF A  
SITE PLAN AGREEMENT WITH  
G S Bunny Investments Inc.**

**WHEREAS** the *Planning Act*, R.S.O. 1990, P.15, as amended, authorizes the entering into of agreements to ensure that development proceeds in accordance with approved plans and drawings;

**AND WHEREAS** the *Planning Act*, R.S.O. 1990, c.P13, authorizes the entering into of agreements to ensure the provision of any and all facilities, works or matters and maintenance;

**AND WHEREAS** Council for the Corporation of the Township of Puslinch deems it expedient to enter into a Site Plan Agreement with G S Bunny Investments Inc.;

**NOW THEREFORE** the Council of the Corporation of the Township of Puslinch enacts as follows:

**THAT** the Corporation of the Township of Puslinch enter into a Site Plan Agreement with G S Bunny Investments Inc. for the lands described as Part Lot 27, Concession 7, Part 3, RP 61R20589 municipally known as 315 Brock Road, Township of Puslinch.

1. **THAT** the Mayor and Clerk are hereby authorized to execute the said Site Plan Agreement.

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 1st DAY  
OF JUNE 2016.**

---

Dennis Lever, Mayor

---

Karen Landry, CAO/Clerk

**THE CORPORATION OF THE TOWNSHIP OF PUSLINCH**

**BY-LAW NUMBER XX/16**

**BEING A BY-LAW TO AUTHORIZE THE ENTERING INTO OF A  
SUBDIVISION AGREEMENT WITH  
1719303 Ontario Inc.**

**WHEREAS** the *Planning Act*, R.S.O. 1990, P.15, as amended, authorizes the entering into of agreements to ensure that development proceeds in accordance with approved plans and drawings;

**AND WHEREAS** the *Planning Act*, R.S.O. 1990, c.P13, authorizes the entering into of agreements to ensure the provision of any and all facilities, works or matters and maintenance;

**AND WHEREAS** Council for the Corporation of the Township of Puslinch deems it expedient to enter into a Subdivision Agreement with 1719303 Ontario Inc.;

**NOW THEREFORE** the Council of the Corporation of the Township of Puslinch enacts as follows:

**THAT** the Corporation of the Township of Puslinch enter into a Subdivision Agreement with 1719303 Ontario Inc. for the lands described as all of Lot 67, Part of Lot 66, 68, 69 & 77, All of Lots 72, 73, 74, 75 & 76 (Inclusive), Parts of Lots 103 to 107 (Inclusive), All of Lots 110 to 111 (Inclusive), Parts of Lots 112 and 131, All of Lots 132 to 135, And Part of Mary Street, James Street, Hill Street and North Street, Concession 8, Township of Puslinch, County of Wellington, municipally known as 0 Badenoch Street E, Township of Puslinch.

1. **THAT** the Mayor and Clerk are hereby authorized to execute the said Subdivision Agreement.

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 1st DAY  
OF JUNE 2016.**

---

Dennis Lever, Mayor

---

Karen Landry, CAO/Clerk