

# March 2, 2021

Township of Ashfield-Colborne-Wawanosh Council will meet in regular session on the 2<sup>nd</sup> day of March 2021, at 9:00 a.m. through Zoom, an online video conferencing platform.

This meeting was held electronically as per By-Law #52-2020, Section 3.10 which allows for Electronic Participation of Council Meetings.

#### 1.0 CALL TO ORDER

Video/Audio Approval – if applicable

#### 2.0 DISCLOSURE OF PECUNIARY INTEREST / POTENTIAL CONFLICT OF INTEREST

#### 3.0 ADOPTION OF PREVIOUS MEETING MINUTES

Moved by Seconded by

ADOPT COUNCIL MINUTES THAT Ashfield-Colborne-Wawanosh Township Council hereby adopts the February 16, 2021 Council Meeting Minutes as written.

#### 4.0 OPEN FORUM (items pertaining to the agenda)

#### 5.0 DELEGATIONS

5.1 9:00 a.m. – Celina Whaling-Rae / County of Huron Planner

Holding Symbol Removal for Gerald Adam - File H01-21 Adam

We have provided Council with a copy of the report prepared by County of Huron Planner Celina Whaling-Rae with respect to the Gerald Adam proposed removal of the Holding Symbol for his property. We have also provided Council with a copy of the By-Law to remove the holding symbol. Ms. Whaling-Rae will review the report with Council.

STAFF COMMENTS: That Council adopts the by-law for the removal of the Holding Symbol in Section 14.

5.2 9:15 a.m.- Celina Whaling-Rae / County of Huron Planner – Planning Application

Gerald Adam Zoning By-Law Amendment Application - File Z03-21 Adam

Moved by Seconded by

ADJOURN COUNCIL MEETING	THAT Ashfield-Colborne-Wawanosh Township Council hereby adjourns their regular Council Meeting.

Moved by Seconded by

OPENTHAT Ashfield-Colborne-Wawanosh Township Council hereby opens thePUBLICPlanning Advisory Committee Public Meeting to deal with the Zoning By-MEETINGLaw Amendment Application received from the Gerald Adam.

We have provided Council with the report prepared by the County Planner, Celina Whaling-Rae, in regards to this Zoning By-Law Amendment. Ms. Whaling-Rae will review the application with the Planning Advisory Committee.

## TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH PLANNING ADVISORY COMMITTEE MEETING

#### Call to order

#### **Declaration of Pecuniary Interests**

#### Purpose

The purpose of this Public Meeting is to consider changing the zoning on the property at Concession Front NTP Part Lot 24, MacKenzie Camp Road (Ashfield) in the Township of Ashfield-Colborne-Wawanosh.

#### Requirement

This Public Meeting is being held under The Planning Act, which requires that Council hold at least one Public Meeting and that proper notice be given.

#### **Application Process**

An application was submitted by Gerald Adam to the Township of Ashfield-Colborne-Wawanosh and considered complete on February 1, 2021.

Notice of the Public Meeting was mailed by the municipality to all property owners within 120 meters of the property on February 10, 2021 and notice was posted on the subject property.

#### Comments:

- 1) Huron County Planner
- 2) Applicant and/or Agent
- 3) Others
- 4) Council's Questions and/or Comments.
- <u>NOTE:</u> If a person or public body that files an appeal of a decision of ACW Township in respect to the proposed rezoning, but does not make written or oral submissions before the proposed rezoning is adopted, the Local Planning Appeal Tribunal (LPAT) may dismiss all or part of the appeal.

### **Zoning By-law Procedure Following Public Meeting**

- This is a Public Meeting, not a Council Meeting; therefore, a decision of Council may or may not be made later this morning.
- If the By-law is passed, the Clerk must send Notice of the Passing of the By-law to all persons notified of this meeting and to any person or public body that has requested it.
- There is a 20-day objection period from the time Notice of Passing has been mailed, where submissions will be received by the Clerk.
- If an objection is received, an appeal is lodged with the Local Planning Appeal Tribunal (LPAT) and the Municipality no longer has jurisdiction of the file and/or the processing time. You may only file an appeal if you have submitted oral or written comments prior to the decision of Council.
- The fee for filing an appeal is \$1,100.00 payable by Certified Cheque or Money Order in Canadian funds, made out to the Minister of Finance, and must be accompanied by Appellant Form (A1).
- If Council does not pass the by-law, the applicant may appeal to the LPAT.
- If the By-law is passed and no objections are received within the 20-day appeal period, the Clerk will certify that the By-law is in force and effect as of the date of its passing and Notice is forwarded to the Planning Department and to the applicant.

## **Recommendation of the Huron County Planner**

It is recommended that Zoning By-Law Amendment Application Z03-21 be approved.

#### **Recommendation of the Planning Advisory Committee**

Effect of Public and Agency Comments on Decision of Council to the Application

#### Adjournment

That there being no further business, the Public Meeting be hereby closed at \_\_\_\_\_ a.m.

Moved by Seconded by

#### CLOSE THAT Ashfield-Colborne-Wawanosh Township Council hereby closes the PUBLIC Planning Advisory Committee Public Meeting. MEETING

Moved by Seconded by

RECONVENETHAT Ashfield-Colborne-Wawanosh Township Council hereby<br/>reconvenes their regular Council Meeting.MEETING

5.3 9:30 a.m. – Celina Whaling-Rae / County of Huron Planner - Consent Application

William (Bill) Vanstone - Consent File C12-2021

We have provided Council with a copy of the report prepared by Celina Whaling-Rae in regard to the application for consent received from the Mr. Vanstone. Ms. Whaling-Rae will review the application with Council.

STAFF COMMENTS: We seek your direction.

#### 6.0 ACCOUNTS

No items scheduled.

#### 7.0 DEPARTMENT / COMMITTEE REPORTS

#### 7.1 Water Department

7.1.1 Water Operations & Maintenance Report – January 2021

We have provided Council with a copy of the report prepared by Veolia Water Canada in regards to the operation and maintenance of our water systems for January 2021.

STAFF COMMENTS: For your information purposes.

7.1.2 2020 Annual Drinking Water System Reports

We have provided Council with a copy of the annual water system reports for the following:

- a) Benmiller Drinking Water System
- b) Century Heights Drinking Water System
- c) Dungannon Drinking Water System
- d) Huron Sands Drinking Water System
- e) Lakeshore Drinking Water System
- f) Lucknow Drinking Water System

STAFF COMMENTS: That Council accepts the annual reports as provided and adopt the following resolution.

4

Moved by Seconded by

ACCEPTTHAT Ashfield-Colborne-Wawanosh Township Council hereby<br/>accepts the 2020 Annual Water Reports as submitted by Veolia<br/>ANNUALANNUALWater for the Benmiller, Century Heights, Dungannon, Huron<br/>Sands, Lakeshore, and Lucknow Drinking Water Systems.REPORTS

#### 7.2 Building Department

No items scheduled.

#### 7.3 <u>Cemetery Department</u>

No items scheduled.

#### 7.4 Drainage Department

No items scheduled.

#### 7.5 Administration Department

7.5.1 Social Media Policy

As a follow-up from our last meeting, we have provided Council with a copy of the report prepared by Clerk Florence Witherspoon, the revised Draft Social Media Policy, and the authorizing by-law. Ms. Witherspoon will be available this morning.

STAFF COMMENTS: We seek your direction.

7.5.2 Communication Strategy

We have provided Council with a copy of the report prepared by Clerk Florence Witherspoon along with a copy of the draft Communication Strategy. Ms. Witherspoon will be available this morning.

STAFF COMMENTS: We seek your direction.

7.5.3 Alternative Voting Method – 2022

We have provided Council with a copy of the by-law authorizing Internet and Telephone Voting as the voting method for the 2022 Municipal Election. Ms. Witherspoon will be available this morning.

STAFF COMMENTS: That the by-law be adopted as presented in Section 14.

7.5.4 Lucknow & District Joint Recreation Board Budget – 2021

We have provided Council with budget for the Lucknow & District Joint Recreation Board Budget for 2021, which was most recently approved by the Board.

STAFF COMMENTS: For your information purposes.

#### 7.6 Public Works Department

No items scheduled.

#### 7.7 Environmental Services

No items scheduled.

#### 7.8 <u>Committee Reports</u>

#### 8.0 NEW BUSINESS

(items to be brought forward to a future meeting)

No items scheduled.

#### 9.0 CORRESPONDENCE / DIRECTION REQUIRED

No items scheduled.

#### 10.0 CORRESPONDENCE / FOR INFORMATION PURPOSES

- 10.1 Lucknow & District Joint Recreation Board Minutes
- 10.2 Dungannon Community Alliance Minutes
- 10.3 Auburn Hall Minutes
- 10.4 Huron County Business Retention and Expansion Project Details
- 10.5 Susanne Cutting Letter Communication Strategy
- 10.6 AMO Annual Conference August 15-18, 2021

#### 11.0 CORRESPONDENCE / ON COUNCIL TABLE

No items scheduled.

#### 12.0 UNFINISHED BUSINESS

12.1 2021 Budget Deliberation Meeting – Friday, March 5<sup>th</sup> at 9:00 a.m.

STAFF COMMENTS: Reminder only.

12.2 Official Plan Meeting – Tuesday, March 9<sup>th</sup> at 7:00 p.m.

STAFF COMMENTS: Reminder only.

#### 13.0 IN-CAMERA / CLOSED SESSION

No items scheduled.

#### 14.0 <u>BY-LAWS</u>

14.1 Social Media Policy By-Law

Moved by Seconded by

SOCIALTHAT leave be given to introduce By-Law 8-2021 being a by-law to adopt a<br/>Social Media Policy for the Township of Ashfield-Colborne-Wawanosh, and<br/>that it now be read severally a first, second, and third time, and finally<br/>passed this 2<sup>nd</sup> day of March 2021.

14.2 Alternative Voting Method By-Law

Moved by Seconded by

ALTERNATITHAT leave be given to introduce By-Law 16-2021 being a by-law to<br/>authorize voting by internet and telephone as the alternative voting method<br/>for the 2022 Municipal Election and that it now be read severally a first,<br/>second, and third time, and finally passed this 2<sup>nd</sup> day of March 2021.

14.3 Gerald Adam H-Symbol Lifting By-Law

Moved by Seconded by

ADAM	THAT leave be given to introduce By-Law 17-2021 being a by-law to
HOLDING	amend Zoning By-law 32-2008, as amended for the Township of Ashfield-
SYMBOL	Colborne-Wawanosh, and that it now be read severally a first, second, and
REMOVAL	third time, and finally passed this 2 <sup>nd</sup> day of March 2021.

14.4 Adam Zoning Amendment By-Law

Moved by Seconded by

ADAMTHAT leave be given to introduce By-Law 18-2021 being a by-law to<br/>amend Zoning By-law 32-2008, as amended, of the Corporation of the<br/>Township of Ashfield-Colborne-Wawanosh, and that it now be read<br/>severally a first, second, and third time, and finally passed this 2<sup>nd</sup> day of<br/>March 2021.

14.5 Confirmation By-Law

Moved by<br/>Seconded byCONFIRMAT<br/>ION BY-LAWTHAT leave be given to introduce By-Law 19-2021 being a by-law to<br/>confirm the proceedings of the Township of Ashfield-Colborne-Wawanosh<br/>meeting held on March 2, 2021, and that it now be read severally a first,<br/>second, and third time, and finally passed this 2<sup>nd</sup> day of March 2021.

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### 15.0 ADJOURNMENT

Moved by Seconded by

ADJOURN THAT Ashfield-Colborne-Wawanosh Township Council does now adjourn to meet again on March 5, 2021 at 9:00 a.m. or at the Call of the Mayor.

~



# Council Minutes February 16, 2021

Township of Ashfield-Colborne-Wawanosh Council met in regular session on the 16<sup>th</sup> day of February 2021, at 9:00 a.m. through Zoom, an online video conferencing platform.

This meeting was held electronically as per By-Law #52-2020, Section 3.10 which allows for Electronic Participation of Council Meetings.

The following individuals were participants during the Council Meeting:

Mayor Deputy Mayor Councillors Glen McNeil Roger Watt Gloria Fisher Wayne Forster Jennifer Miltenburg Anita Snobelen Bill Vanstone

Staff Present

CAO/Deputy-Clerk Treasurer Chief Building Official Public Works Superintendent Clerk County Planner Mark Becker Ellen McManus Brett Pollock Brian Van Osch Florence Witherspoon Celina Whaling-Rae

OTHERS PRESENT VIA ZOOM (Viewing and Observing Only): Stephen Jackson, John Grace, John Marshall, Adam Martin, Amanda Hallman, Andrea Fisher, Ben Crooks, Dan Kerr, Doug Culbert, Janice Hallahan, John Marshall, Kaitlin Bos, Kathleen Houlohan Chayer, Tony McQuail, Matthew Sproul, Susanne Cutting, Taylor Lambert, Sean Thomas, Don Bester, Shana Barnim, and Brian Barnim.

#### 1.0 CALL TO ORDER

The municipality will be recording this meeting to "ensure meetings can be open to the public".

#### 2.0 DISCLOSURE OF PECUNIARY INTEREST / POTENTIAL CONFLICT OF INTEREST

None disclosed.

#### 3.0 ADOPTION OF PREVIOUS MEETING MINUTES

3.1 Council Meeting – February 2, 2021

Moved by	Miltenburg
Seconded by	Watt

ADOPT COUNCIL	#1	THAT Ashfield-Colborne-Wawanosh Township Council hereby adopts the February 2, 2021 Council Meeting Minutes as written.	Э
OCONOL		r cordary 2, 2021 Council Meeting Mindles as written.	
MINUTES		Carrie	d.

#### 4.0 OPEN FORUM (items pertaining to the agenda)

Tony McQuail addressed Council with respect to Section 7.5.1 being the LPAT Appeal for the Dissolution of Ward System By-Law.

#### 5.0 DELEGATIONS

5.1	9:00 a.	m Celina Wi	m Celina Whaling-Rae / County of Huron Planner – Planning Applications				
	A).		Estate of Dorothy Brindley Zoning By-Law Amendment Application - #Z01-21				
	В).	Official Plan	colborne Property Holdings & Barnim Property Holdings Inc. (Brian Barnim) official Plan Amendment Application - ACW OPA No. 10 oning By-Law Amendment Application – #Z02-21				
			Moved by Seconded by	Vanstone Forster			
ADJO COUN		#2		-Colborne-Wawanosh Township Council hereby adj ouncil Meeting.	ourns		
MEET	ING				Carried.		
			Moved by Seconded by	Fisher Snobelen			
OPEN PUBL MEET	IC	#3		-Colborne-Wawanosh Township Council hereby ope sory Committee Public Meeting to deal with the follow			
				g By-Law Amendment Application received from the othy Brindley	Estate		
			Ameno	I Plan Amendment Application and Zoning By-Law dment Application received from Colborne Property gs & Barnim Property Holdings Inc. (Brian Barnim)			
					Carried.		

#### 5.1 A). Estate of Dorothy Brindley Zoning By-Law Amendment Application - #Z01-21

We have provided Council with the report prepared by the County Planner, Celina Whaling-Rae, in regards to this Zoning By-Law Amendment. Ms. Whaling-Rae reviewed the application with the Planning Advisory Committee.

#### TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH PLANNING ADVISORY COMMITTEE MEETING

#### Call to order

#### **Declaration of Pecuniary Interests**

None declared.

#### Purpose

The purpose of this Public Meeting is to consider changing the zoning on the property at Lake Range Concession Plan 582 Part Block D Part Martin Road, Plan 590 Blocks F and G and RP22R3313 Parts 1 to 6 (Ashfield) (38807 South Street), in the Township of Ashfield-Colborne-Wawanosh.

#### Requirement

This Public Meeting is being held under The Planning Act, which requires that Council hold at least one Public Meeting and that proper notice be given.

#### **Application Process**

An application was submitted by the Estate of Dorothy Brindley to the Township of Ashfield-Colborne-Wawanosh and considered complete on January 6, 2021.

### Comments:

1) Huron County Planner

Celina Whaling-Rae, County of Huron Planner reviewed the application with the Planning Advisory Committee.

2) Applicant and/or Agent

Doug Culbert on behalf of the owners was present to answer any questions of the Planning Advisory Committee.

3) Others

None.

4) Council's Questions and/or Comments.

Councillor Wayne Forster wanted clarification with respect to the existing barn.

<u>NOTE:</u> If a person or public body that files an appeal of a decision of ACW Township in respect to the proposed rezoning, but does not make written or oral submissions before the proposed rezoning is adopted, the Local Planning Appeal Tribunal (LPAT) may dismiss all or part of the appeal.

## Zoning By-law Procedure Following Public Meeting

- This is a Public Meeting, not a Council Meeting; therefore, a decision of Council may or may not be made later this morning.
- If the By-law is passed, the Clerk must send Notice of the Passing of the By-law to all persons notified of this meeting and to any person or public body that has requested it.
- There is a 20-day objection period from the time Notice of Passing has been mailed, where submissions will be received by the Clerk.
- If an objection is received, an appeal is lodged with the Local Planning Appeal Tribunal (LPAT) and the Municipality no longer has jurisdiction of the file and/or the processing time. You may only file an appeal if you have submitted oral or written comments prior to the decision of Council.
- The fee for filing an appeal is \$1,100.00 payable by Certified Cheque or Money Order in Canadian funds, made out to the Minister of Finance, and must be accompanied by Appellant Form (A1).
- If Council does not pass the by-law, the applicant may appeal to the LPAT.
- If the By-law is passed and no objections are received within the 20-day appeal period, the Clerk will certify that the By-law is in force and effect as of the date of its passing and Notice is forwarded to the Planning Department and to the applicant.

#### **Recommendation of the Huron County Planner**

It is recommended that Zoning By-Law Amendment Application Z01-21 be approved.

#### **Recommendation of the Planning Advisory Committee**

It was recommended that Zoning By-Law Amendment Application Z01-21 be approved.

#### Effect of Public and Agency Comments on Decision of Council to the Application

No public comments were received on this application so there was no effect on the decision.

Agency comments were received in support of the application, the effect of which resulted in a decision to approve the application.

#### 5.1 B). Colborne Property Holdings & Barnim Property Holdings Inc. (Brian Barnim) Official Plan Amendment Application - ACW OPA No. 10 Zoning By-Law Amendment Application – #Z02-21

We have provided Council with the report prepared by the County Planner, Celina Whaling-Rae, in regards to this Zoning By-Law and Official Plan Amendment. Ms. Whaling-Rae reviewed the application with the Planning Advisory Committee.

## TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH PLANNING ADVISORY COMMITTEE MEETING

#### Call to order

#### **Declaration of Pecuniary Interests**

None declared.

#### Purpose

The purpose of this Public Meeting is to consider changing the Zoning and Official Plan Designation on the property at Plan 564 Part Lot 7 as RP22R4442 Part 1 with Right of Way (Colborne) (33884 Airport Road) & Part Block A Western Division as RP22R2001 Parts 1,2, and 3 Subject to Right of Way (33862 Airport Road), in the Township of Ashfield-Colborne-Wawanosh.

#### Requirement

This Public Meeting is being held under The Planning Act, which requires that Council hold at least one Public Meeting and that proper notice be given.

#### **Application Process**

An application was submitted by Colborne Property Holdings & Barnim Property Holdings Inc. (Brian Barnim) to the Township of Ashfield-Colborne-Wawanosh and considered complete on January 15, 2021.

Notice of the Public Meeting was mailed by the municipality to all property owners within 400 feet of the property on January 26, 2021 and notice was posted on the subject property.

#### **Comments:**

1) Huron County Planner

Celina Whaling-Rae, County of Huron Planner reviewed the application with the Planning Advisory Committee.

2) Applicant and/or Agent

Brian Barnim and Shana Barnim addressed the Planning Advisory Committee expressing support of their applications filed.

3) Others

John Grace, Mayor of Goderich Ben Crooks, HM Aero Consultants on behalf of Goderich Adam Martin, Goderich Planner Taylor Lambert, Chair of the Airport Taskforce Committee John Marshall, Huron County Economic Development

All the above addressed the Planning Advisory Committee expressing their concerns with the applications filed.

4) Council's Questions and/or Comments.

Councillor Jennifer Miltenburg expressed her concerns with respect to the comments received this morning.

Councillor Bill Vanstone and Councillor Wayne Forster wanted clarification on the Airport Task Force.

<u>NOTE:</u> If a person or public body that files an appeal of a decision of ACW Township in respect to the proposed rezoning, but does not make written or oral submissions before the proposed rezoning is adopted, the Local Planning Appeal Tribunal (LPAT) may dismiss all or part of the appeal.

#### Zoning By-law Procedure Following Public Meeting

- This is a Public Meeting, not a Council Meeting; therefore, a decision of Council may or may not be made later this morning.
- If the By-law is passed, the Clerk must send Notice of the Passing of the By-law to all persons notified of this meeting and to any person or public body that has requested it.
- There is a 20-day objection period from the time Notice of Passing has been mailed, where submissions will be received by the Clerk.
- If an objection is received, an appeal is lodged with the Local Planning Appeal Tribunal (LPAT) and the Municipality no longer has jurisdiction of the file and/or the processing time. You may only file an appeal if you have submitted oral or written comments prior to the decision of Council.
- The fee for filing an appeal is \$1,100.00 payable by Certified Cheque or Money Order in Canadian funds, made out to the Minister of Finance, and must be accompanied by Appellant Form (A1).
- If Council does not pass the by-law, the applicant may appeal to the LPAT.
- If the By-law is passed and no objections are received within the 20-day appeal period, the Clerk will certify that the By-law is in force and effect as of the date of its passing and Notice is forwarded to the Planning Department and to the applicant.

#### **Recommendation of the Huron County Planner**

It is recommended that Zoning By-Law Amendment Application Z02-21 and Official Plan Amendment No. 10 be deferred to allow an opportunity for staff and the applicant to work with those parties who have expressed concerns.

#### **Recommendation of the Planning Advisory Committee**

It was agreed that Zoning By-Law Amendment Application Z02-21 and Official Plan Amendment No. 10 be deferred to allow an opportunity for staff and the applicant to work with those parties who have expressed concerns.

## Adjournment

That there being no further business, the Public Meeting be hereby closed at 10:20 a.m.

		Moved by Seconded by	Forster Watt	
CLOSE PUBLIC	#4		-Colborne-Wawanosh Township Council hereby clo ory Committee Public Meeting.	oses the
MEETING		Flamming Advis	ory commutee Public Meeting.	Carried.
		Moved by Seconded by	Vanstone Snobelen	
RECONVENE COUNCIL MEETING	#5		-Colborne-Wawanosh Township Council hereby eir regular Council Meeting.	Carried.

5.2 9:30 a.m. - Celina Whaling-Rae / County of Huron Planner - Minor Variance

Minor Variance Application File ACW MV01-21 Hallman

Moved by	Miltenburg
Seconded by	Forster

OPEN #6 THAT Ashfield-Colborne-Wawanosh Council hereby adjourns the COMMITTEE regular Council Meeting and hereby opens their Committee of Adjustment OF Meeting and Hearing to review the Minor Variance Application submitted ADJUSTMENT by Amanda Hallman. MEETING Carried.

We have provided Council with a copy of the report prepared by the County Planner, Celina Whaling-Rae, in regard to this application. Ms. Whaling-Rae reviewed the application with the Committee of Adjustment.

STAFF COMMENTS: That this application for minor variance be approved subject to the following conditions:

- That the structure be located within the footprint contained on the site plan that • accompanied the application.
- That the structure be constructed as shown in the elevation drawing that accompanied the application.
- That the variances' approval be valid for a period of 18 months from the date of the Committee's decision.

#### PUBLIC COMMENTS:

None.

#### **APPLICANT COMMENTS:**

None.

ACTION: The Committee of Adjustment Committee agreed to approve the application subject to the conditions as outlined above.

		Moved by Seconded by	Watt Snobelen
APPROVE ACW MV01- 21 HALLMAN	#7	agrees to appr	-Colborne-Wawanosh Committee of Adjustment hereby ove the Minor Variance Application ACW MV01-21 Hallman subject to the conditions as noted in the Planner's Report. Carried.

#### Effect of Public and Agency Comments on Decision of Council to the Application

No public comments were received on this application so there was no effect on the decision.

Agency comments were received in support of the application, the effect of which resulted in a decision to approve the application.

		Moved by Seconded by	Miltenburg Fisher		
CLOSE COMMITTEE	#8		THAT Ashfield-Colborne-Wawanosh Committee of Adjustment hereby closes their meeting.		
OF ADJUSTMENT		closes their the	eting.	Carried.	
		Moved by Seconded by	Snobelen Forster		
RECONVENE COUNCIL MEETING	#9		Colborne-Wawanosh Township Council hereby ir regular Council Meeting.	Carried.	

5.3 9:45 a.m. – Celina Whaling-Rae / County of Huron Planner - Consent Application

Matthew Sproul - Consent File C04-2021

We have provided Council with a copy of the report prepared by Celina Whaling-Rae in regard to the application for consent received from the Matthew Sproul. Ms. Whaling-Rae reviewed the application with Council.

STAFF COMMENTS: We seek your direction.

ACTION: Council agreed to recommend to the County of Huron that this application for Consent be granted subject to the conditions as outlined in the Planners Report.

5.4 10:00 a.m. – Stephen Jackson / Maitland Valley Conservation Authority

Proposed Shoreline Hazard Mapping Project

We have provided Council with a copy of the presentation with respect to the proposed Shoreline Hazard Mapping Project to be completed over the next few years, which affects ACW, Goderich, and the Municipality of Central Huron. Mr. Jackson made his presentation to Council.

STAFF COMMENTS: We seek your direction.

ACTION: Council agreed to proceed with the proposed Shoreline Hazard Mapping Project as outlined in the report to Council. Staff will ensure that this is included in the 2021 Budget.

#### 6.0 <u>ACCOUNTS</u>

6.1 Payment of Current Accounts

		Moved by Seconded by	Miltenburg Snobelen
APPROVE ACCOUNTS	#10		Colborne-Wawanosh Township Council hereby authorizes the February 2021 accounts as presented.

6.2 Payment of Previous Month Actual Accounts

		Moved by Seconded by	Vanstone Miltenburg	
APPROVE ACTUAL PAYMENTS	#11		-Colborne-Wawanosh Township Council hereby ayment of the January 2021 accounts in the amount 3.	t Carried.

Carried.

6.3 Summary Revenue/Expenditure Reports

Reports for the Township, Lucknow & District Medical Centre, and Lucknow & District Recreation for January 2021.

		Moved by Seconded by	Snobelen Forster	
REVENUE EXPEND- ITURE REPORT	#12		Colborne-Wawanosh Township Council adopts the nue/expenditure reports of the Treasurer as written.	Carried.

#### 7.0 DEPARTMENT / COMMITTEE REPORTS

#### 7.1 <u>Water Department</u>

7.1.1 Dungannon Arsenic Treatment - ICIP (Investing in Canada Infrastructure Program)

We are happy to provide Council with a copy of the email received from the Minister of Infrastructure with respect to the approval of the Dungannon Water System Arsenic Treatment, Reservoir and Pump Station Funding. The engineers will begin the process for completing the design and prepare for tendering the project.

STAFF COMMENTS: For your information purposes.

ACTION: Noted and confirmed with proceeding with the final design and the preparation for tendering the project.

#### 7.2 Building Department

7.2.1 Chief Building Official's Report

We have provided Council with a copy of Mr. Pollock's report. Mr. Pollock was available this morning.

STAFF COMMENTS: For your information purposes.

ACTION: Noted and filed.

7.2.2 Proposed Official Plan Amendment No. 11

We have provided Council with a copy of the report prepared by Celina Whaling-Rae, County of Huron Planner in regards to a recommendation that staff proceed with drafting a Notice of Public Meeting in order to consider the proposed Official Plan Amendment No. 11 as outlined in the report. Ms. Whaling-Rae was available this morning.

STAFF COMMENTS: We seek your direction.

ACTION: Council agreed to have staff proceed with drafting a Notice of Public Meeting in order to consider the proposed Official Plan Amendment No. 11 as outlined in the Planners Report.

#### 7.3 <u>Cemetery Department</u>

No items scheduled.

#### 7.4 Drainage Department

No items scheduled.

#### 7.5 Administration Department

7.5.1 LPAT Appeal – Dissolution of Ward System By-Law

The Township has received an appeal to the Local Planning Appeal Tribunal with respect to the passage of By-Law 89-2020 for the dissolution of the ward system for electoral purposes. The Township has submitted the package to LPAT. Staff will keep Council apprised of the proceedings.

STAFF COMMENTS: For your information purposes.

A motion was brought forth by Councillor Wayne Forster as well as requesting a recorded vote.

CAO/Deputy-Clerk Mark Becker asked each Council Member to state their Division Vote and it was recorded as follows:

YEAS: Forster NAYS: Fisher, McNeil, Miltenburg, Snobelen, Vanstone, Watt

> Moved by Forster Seconded by Watt

REPEAL #13 DISSOLUTIO N OF THE WARD SYSTEM NOT PASSED THAT Ashfield-Colborne-Wawanosh Township Council hereby agrees to repeal by-law 89-2020 being the by-law for the Dissolution of Ward System.

8

ACTION: Noted.

7.5.2 Social Media Policy

As a follow-up from our last meeting, we have provided Council with a copy of the report prepared by Clerk Florence Witherspoon, the revised Draft Social Media Policy, and the authorizing by-law. Ms. Witherspoon was available this morning.

STAFF COMMENTS: We seek your direction.

ACTION: Council agreed to proceed with "Allowing full-commenting abilities, that will be monitored during business hours and addressed as presented in the Social Media Policy. This would allow for two-way communication. It is noted that there is inherent risk of comments being made public for a short period of time that maybe disrespectful."

Council agreed to bring back the revised Social Media Policy and authorizing by-law to the next meeting incorporating the option selected by Council with a zero tolerance for those who are disrespectful.

7.5.3 Municipal Modernization Program – Second Intake

We have provided Council with a copy of the letter received and the report prepared by Treasurer Ellen McManus with respect to the above noted funding opportunity. Ms. McManus was available this morning.

STAFF COMMENTS: We seek your direction.

ACTION: Council agreed to have staff proceed with an application as recommended by staff for an integrated meeting management software program for the Township that will meet expectations of increase stakeholder participation, evolving accessibility standards and improve organizational efficiencies.

7.5.4 Maitland Valley Conservation Authority – 2021 Priorities and Draft Budget

We have provided Council with a copy of the letter and the 2021 Priorities and Draft Budget for the Maitland Valley Conservation Authority.

STAFF COMMENTS: For your information purposes and recommended support.

ACTION: Council agreed to support the proposed 2021 Draft Budget of the Maitland Valley Conservation Authority.

7.5.5 Consolidated Fee By-Law Amendments

We have provided Council with a copy of the revised Consolidated Fee By-Law reflecting the amendments made by the County of Huron Planning Fees, Lucknow & District Joint Recreation Board Rental Fees, Water Rates, and incorporating the new Site Plan Control Fee for 2021, as per the following Sections:

Schedule A

- C. Building Fees / Site Plan Control Applications (Approved Last Meeting)
- D. Planning Fees / County of Huron (Approved 5 Year Plan)
- O. Water Service Rates (Approved 5 Year Financial Plan)

Schedule B

• Lucknow & District Recreation Department Rates & Fees (Approved by Board)

STAFF COMMENTS: That Council adopts the by-law as presented in Section 14.

ACTION: Council agreed to adopt the by-law in Section 14.

#### 7.5.6 2021 Budget Deliberations

Staff would like to set a date to review with Council the proposed Draft 2021 Budget. We would like to meet in March for a morning meeting and see how far along we get. If we need more time, we will adjourn to meet again for another morning session to complete. Staff feels that an all-day zoom meeting may be too much.

STAFF COMMENTS: We seek your direction.

ACTION: Council agreed to set a date of Friday, March 5, 2021 beginning at 9:00 a.m.

7.5.7 Municipal Asset Management Program Application for Funding

We have provided Council with a copy of the report prepared by Treasurer Ellen McManus along with a copy of the Public Sector Digest project proposal with respect to the Municipal Asset Management Program. Ms. McManus was available this morning.

STAFF COMMENTS: We seek your direction.

ACTION: Council agreed to have staff make an application to the Municipal Asset Management Program for funding to undertake the O.Reg 588 Compliant Asset Management Plan, Condition Protocols and Asset Profile Development Project, as proposed by Public Sector Digest.

7.5.8 Benmiller Community Hall

The Benmiller Community Hall Committee called for quotations from three different contractors for a central air conditioner for the hall. We have provided Council with a copy of the committee's recommended quotation received from Edward Fuels for a 3-ton outdoor standard heat pump unit with indoor head standard heat pump in the total amount of \$ 6,328.00 taxes included.

The Charles H. Ivey Foundation have kindly granted and committed \$ 20,000 to the Benmiller Community Hall in the name of Peter Ivey, which will be used to purchase the central air conditioner unit.

STAFF COMMENTS: That Council adopt the following resolution.

ACTION: Council agreed to accept the recommended quotation and adopt the following resolution. Staff will send a letter of thanks to the Charles H. Ivey Foundation for their kind donation.

Moved by	Vanstone
Seconded by	Fisher

BENMILLER<br/>COMMUNIT<br/>Y HALL AIR<br/>CONDITION#14THAT Ashfield-Colborne-Wawanosh Township Council hereby accepts the<br/>quotation of Edward Fuels in the amount of \$ 6,328.00 taxes included,<br/>to supply and install a standard heat pump unit at the Benmiller Community<br/>Hall, with the funds coming from the Charles H. Ivey Foundation in the<br/>name of Peter Ivey.

Carried.

#### 7.5.9 Alternative Voting Method – 2022

We have provided Council with a copy of the report prepared by Clerk Florence Witherspoon in regards to Alternative Voting for the 2022 Election. Ms. Witherspoon will be available this morning.

STAFF COMMENTS: That Council direct staff to bring forward a by-law authorizing Internet and Telephone Voting as the voting method for the 2022 Municipal Election. We seek your direction.

ACTION: Council agreed to have staff bring forward a by-law authorizing Internet and Telephone Voting as the voting method for the 2022 Municipal Election.

#### 7.6 Public Works Department

No items scheduled.

#### 7.7 Environmental Services

No items scheduled.

#### 7.8 <u>Committee Reports</u>

Councillor Jennifer Miltenburg reported on the St. Helens Hall Committee and the Dungannon Community Alliance Committee.

Councillor Wayne Forster reported on the Coalition for Huron Injury Preventions Committee.

#### 8.0 NEW BUSINESS

(items to be brought forward to a future meeting)

No items scheduled.

#### 9.0 CORRESPONDENCE / DIRECTION REQUIRED

9.1 Goderich Pickleball – Request for Donation

We have provided Council with a copy of their request for funding.

STAFF COMMENTS: That Council defer this matter to the 2021 Budget Deliberations.

ACTION: Council agreed to defer the request to the 2021 Budget Deliberations.

		Moved by Miltenburg Seconded by Vanstone	
EXTEND HOUR OF	#15	THAT Ashfield-Colborne-Wawanosh Township Council hereby agre extend the hour to complete the business of the day.	es to
BUSINESS			Carried.

#### 10.0 CORRESPONDENCE / FOR INFORMATION PURPOSES

- 10.1 Grey Highlands Resolution Insurance Costs
- 10.2 United Way Thank You Coldest Night of the Year Goderich
- 10.3 Municipality of Perth South Conservation Authorities

#### 11.0 CORRESPONDENCE / ON COUNCIL TABLE

No items scheduled.

#### 12.0 UNFINISHED BUSINESS

12.1 Official Plan Meeting – Tuesday, March 9<sup>th</sup> at 7:00 p.m.

STAFF COMMENTS: Reminder only.

ACTION: Noted.

#### 13.0 IN-CAMERA / CLOSED SESSION

No items scheduled.

#### 14.0 <u>BY-LAWS</u>

14.1 Brindley Zoning Amendment By-Law

Moved by	Vanstone
Seconded by	Snobelen

BRINDLEY	#16	THAT leave be given to introduce By-Law 12-2021 being a by-law to
ZONING		amend Zoning By-law 32-2008, as amended, of the Corporation of the
AMENDMEN		Township of Ashfield-Colborne-Wawanosh, and that it now be read
Т		severally a first, second, and third time, and finally passed this 16 <sup>th</sup> day of
		February 2021.

Carried.

14.2 Colborne Property Holdings & Barnim Property Holdings Inc. Official Plan Amendment

Deferred.

14.3 Colborne Property Holdings & Barnim Property Holdings Inc. Zoning Amendment By-Law

Deferred.

14.4 Social Media Policy By-Law

Deferred.

14.5 Consolidated Fee By-Law Amendment

		Moved by Seconded by	Watt Miltenburg
CONSOLIDA TED FEE BY-LAW	#17	various fees for	given to introduce By-Law 11-2021 being a by-law to set r the Township of Ashfield-Colborne-Wawanosh, and that it everally a first, second, and third time, and finally passed this ruary 2021.

	Moved by Forster Seconded by Fisher	
CONFIRMAT #18 ION BY-LAW	THAT leave be given to introduce By-Law 15-2021 being a by-law to confirm the proceedings of the Township of Ashfield-Colborne-Wawanosh meeting held on February 16, 2021, and that it now be read severally a first, second, and third time, and finally passed this 16 <sup>th</sup> day of February 2021.	
	Curre	~
15.0 ADJOURNMENT	-	
	Moved by Forster	

#### 1

Moved by	Forster
Seconded by	Miltenburg

THAT Ashfield-Colborne-Wawanosh Township Council does now adjourn to meet again on March 2, 2021 at 9:00 a.m. or at the Call of the Mayor. Carried. ADJOURN #19

~

Mayor, Glen McNeil



# PLANNING & DEVELOPMENT 57 Napier Street, Goderich, Ontario N7A 1W2 CANADA Phone: 519.524.8394 Ext. 3 Fax: 519.524.5677 Toll Free: 1.888.524.8394 Ext. 3 www.huroncounty.ca

To:Township of Ashfield-Colborne-Wawanosh, Mayor, and Members of CouncilFrom:Celina Whaling-Rae, PlannerDate:February 24, 2021

#### Re: Removal of a –H Holding Symbol

Front Concession NTP, Part Lot 24 PCL;J (Ashfield), Township of Ashfield-Colborne-Wawanosh

#### Owner: Gerry Adam

#### RECOMMENDATION

It is recommended that the removal of the –H Holding Symbol be approved.

#### PURPOSE

The purpose of this report is to remove a –H Holding Symbol which was placed on a portion of the subject property.

#### REVIEW

The subject property is zoned 'Natural Environment (NE1)' and 'Natural Environment – Special – Holdign (NE1-1-H)'. Section 3.31.4 of the ACW Zoning By-law stipulates that vacant lots along the lakeshore shall be controlled with a Holding symbol. Said Holding symbol shall be lifted when a property owner submits the necessary studies to both the Conservation Authority and the Township to permit development. In this instance, the property owner has submitted the necessary geotechnical assessment and site plan to satisfy permitting requirements.

The entire property is 1577.94 acres in size in size. It is designated Lakeshore Residential and Natural Environment in the ACW Official Plan.

#### COMMENTS

No circulation to agencies or the public is required for the purpose of removing a holding symbol. ACW staff is supportive of the removal.

#### SUMMARY

It is recommended that the removal of the -H Holding Symbol be approved.

Sincerely,

Celinal Maliz-Kal

Celina Whaling-Rae Planner

5.1 14.3



### THE CORPORATION OF THE TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH

# BY-LAW NUMBER 17-2021

# **BEING A BY-LAW** to amend the Zoning By-law 32-2008 for the Township of Ashfield-Colborne-Wawanosh.

**WHEREAS** the Municipal Council of the Corporation of the Township of Ashfield-Colborne-Wawanosh considers it advisable to amend Zoning By-law 32-2008, as amended, of the Corporation of the Township of Ashfield-Colborne-Wawanosh and;

**NOW THEREFORE**, the Council of the Corporation of the Township of Ashfield-Colborne-Wawanosh enacts as follows:

- 1. This by-law shall apply to Front Concession NTP, Part Lot 24 (Ashfield), Township of Ashfield-Colborne-Wawanosh; as described on the attached Schedules 1, 2, 3 & 4.
- 2. By-law 32-2008 is hereby amended by removing the holding symbol from the zoning of the lands designated 'lands from which holding symbol is removed'.
- 3. Zone Map 3A, Schedule A, By-law 32-2008 is hereby amended and replaced by the amended Zone Map 3A, which is declared to be part of this by-law.
- 4. This by-law shall come into force upon final passing, pursuant to Section 36(4) of the Planning Act, RSO 1990, as amended.

Read a first and second time this 2<sup>nd</sup> day of March 2021.

Read a third time and finally passed this 2<sup>nd</sup> day of March 2021.

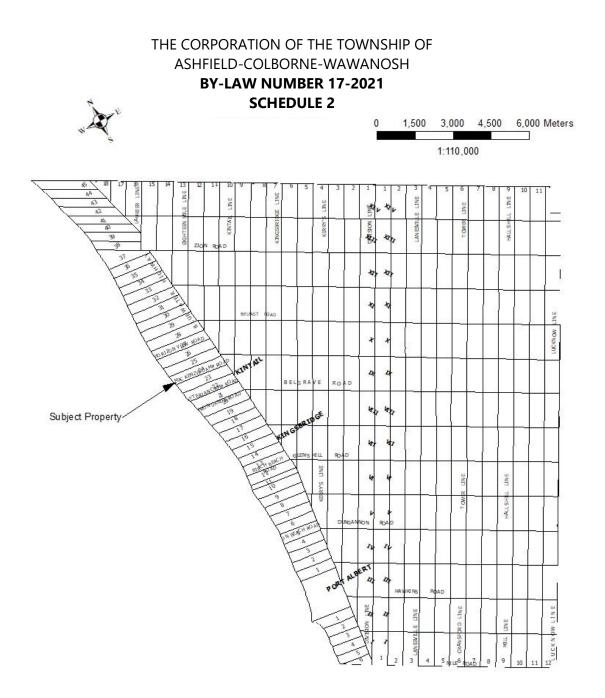
Glen McNeil, Mayor

Mark Becker, CAO/Deputy Clerk

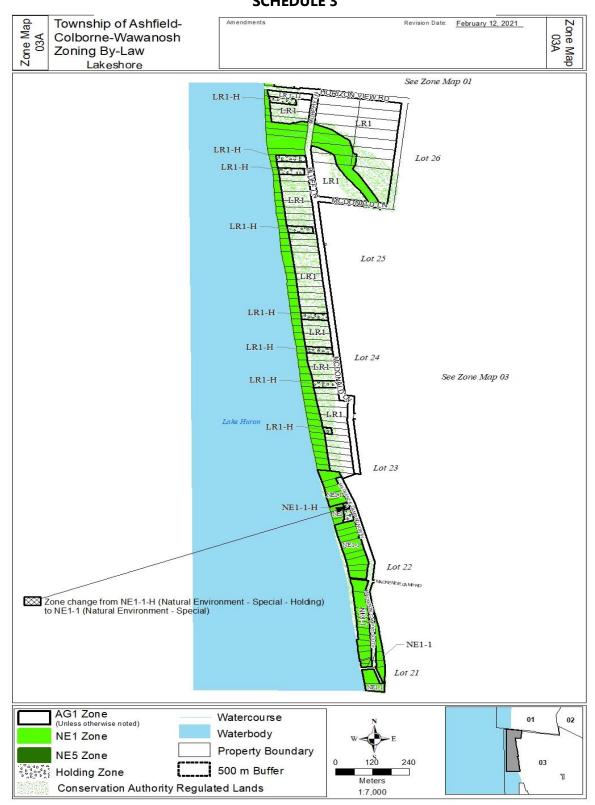
## THE CORPORATION OF THE TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH BY-LAW NUMBER 17-2021 SCHEDULE 1

By-law 17-2021 has the following purpose and effect:

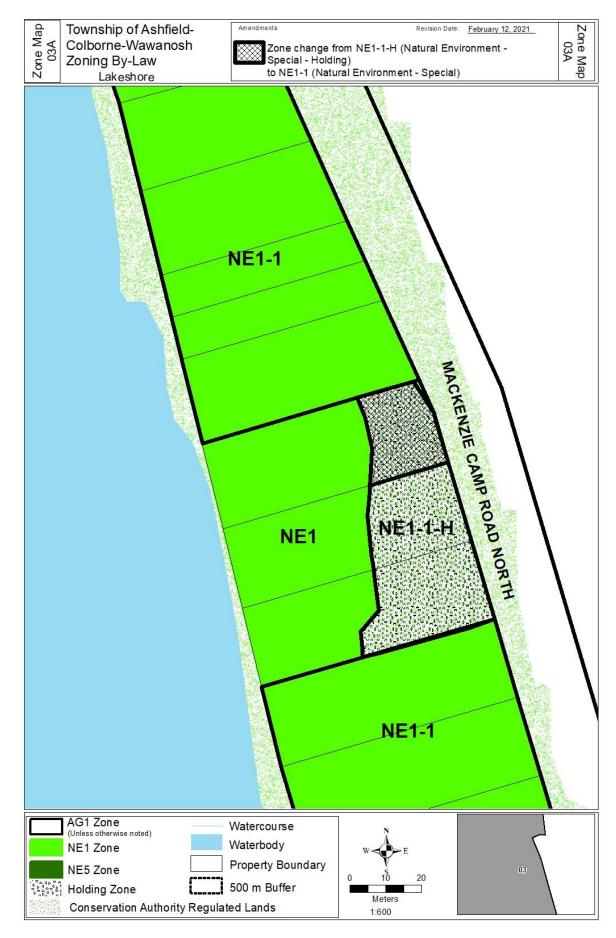
- The purpose of the proposed by-law is to remove the holding zone on Front Concession NTP, Part Lot 24 (Ashfield), Township of Ashfield-Colborne-Wawanosh. The zoning on a portion of the property will then be NE1-1 (Natural Environment – Special Zone) rather than NE1-1-H (Natural Environment – Special Zone – Holding).
- 2. This by-law amends the Zoning By-law of the Corporation of the Township of Ashfield-Colborne-Wawanosh 32-2008.
- 3. The location map and key map showing the location to which this by-law applies are found on the following pages and are entitled Schedule 2, 3 & 4.



## THE CORPORATION OF THE TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH BY-LAW NUMBER 17-2021 SCHEDULE 3



## THE CORPORATION OF THE TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH BY-LAW NUMBER 17-2021 SCHEDULE 4





# Notice of Removal of Holding Symbol

Planning Act, R.S.O. 1990, cP. 13., S. 34

The purpose of this notice is to notify you that your property is now eligible for the –h Holding Symbol to be lifted. This will in effect allow you to become eligible for development as per the applicable zoning by-law provisions.

You are invited to participate in an <u>online</u> Council Meeting on Tuesday, March 2nd, 2021 at **9:00am.** During this time, the Township of Ashfield-Colborne-Wawanosh Council will be considering the change.



Owner/Applicant:Gerry AdamLocation of Property:CON FRONT NTP PT LOT 24 (Ashfield) (MacKenzie Camp Road)

# The Proposed Change

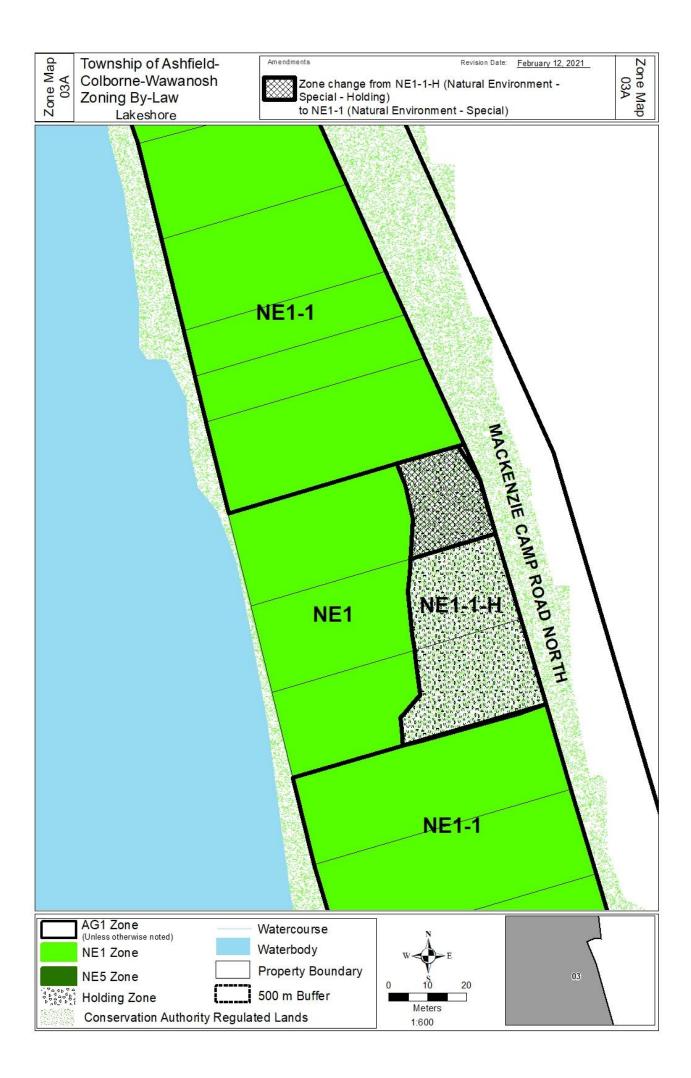
The ACW Zoning By-law allows the Township to control vacant properties along the lakeshore with a – h Holding Symbol. This is done to ensure that the appropriate studies are submitted to the Township and the Conservation Authority at the time that development is proposed. Based on your submitted geotechnical study and site plan, your property is eligible to have the –h Holding Symbol lifted. This will amend the zoning on your property from 'Natural Environment (NE1)' and 'Natural Environment – Special – Holding (NE1-1-H)' to 'Natural Environment (NE1)' and 'Natural Environment – Special (NE1-1). Maps showing the general location of the lands to which this change applies are shown below.

# How to Access the Public Meeting

As a result of the COVID-19 Pandemic, the Township of Ashfield-Colborne-Wawanosh has closed the municipal office to the public. The Public Meeting will be held in electronic format.

You are entitled to attend this public meeting electronically to express your views about this application, or you may be represented by counsel for that purpose.

For information on how to participate in the Public Meeting, please visit the municipal website at <u>http://www.acwtownship.ca/council/council-agendas-4/</u>. Details on participating in the electronic meeting will be provided when the agenda is published at the end of the business day on the Friday before the meeting. If you have any questions regarding how to participate in the meeting, please phone the municipal office at 519-524-4669.





# **PLANNING & DEVELOPMENT** 57 Napier Street, Goderich, Ontario N7A 1W2 CANADA **Phone:** 519.524.8394 Ext. 3 **Fax:** 519.524.5677 **Toll Free:** 1.888.524.8394 Ext. 3

www.huroncounty.ca

To: Township of Ashfield-Colborne-Wawanosh, Mayor, and Members of Council
From: Celina Whaling-Rae, Planner
Date: February 24, 2021

#### Re: Zoning By-law Amendment Application Z03-21

Front Concession NTP, Part Lot 24 PCL;J (Ashfield), Township of Ashfield-Colborne-Wawanosh

#### Owner/Applicant: Gerry Adam

This report is submitted to Ashfield-Colborne-Wawanosh (ACW) Council for the Public Meeting on March 2<sup>nd</sup>, 2021.

#### RECOMMENDATION

It is recommended that Zoning By-law Amendment Application Z03-21 be **approved.** 

#### PURPOSE

The purpose of the proposed Zoning By-law Amendment is to allow for the construction of a recreational residence, and to exempt the property from the minimum parking requirements outlined in Section 3.26 of the ACW Zoning By-law.

#### REVIEW

The entirety of the subject property is 1577.94 square metres in size. It is designated Lakeshore Residential and Natural Environment in the ACW Official Plan, and is zoned 'Natural Environment – Special Zone (NE1-1)' and 'Natural Environment (NE1)' (Zone Map 3A). The applicant is proposing to re-zone the entire property to 'Natural Environment – Special Zone NE1-46)' The NE1-46 special zone stipulates that:

Notwithstanding the provisions of the by-law to the contrary, those lands zoned NE1-46 may be used for one recreational residence and accessory buildings, subject to the provisions of the Section 16 (LR1 zone). Notwithstanding Section 3.26.1, no minimum parking requirement shall apply to any permitted uses within the NE1-46 zone. All other applicable provisions shall apply.

The applicant has submitted a geotechnical assessment that is supportive of the development proposal for the subject property. Section 3.26 stipulates that a minimum of one parking space must be provided on – site for a single detached residence. Due to existing elevations on the property and the proximity of the proposed recreational residence to the east lot line, the applicant is seeking exemption from this requirement. As demonstrated in Figure 1, there is adequate room on the existing road allowance for on-street parking. While this scenario is not ideal, staff are supportive under the circumstances. On-road parking does not appear to pose any safety hazards, and the site plan will allow for the recreational residence to be constructed as far from existing hazards as possible.

No comments were received from the public on the subject application. Maitland Valley Conservation Authority (MVCA) has no concerns with the proposal. Marcus Maddalena, Huron County's Biologist and Stewardship Coordinator, has not submitted comment at the time of writing, but has indicated he has no concerns. ACW Staff are supportive of the proposal.





Figure 2: Submitted Site Plan



#### COMMENTS

	Not	No	Concerns	See Conditions / Comment
	Received	Concerns		
Neighbours	$\checkmark$			
ACW Staff		$\checkmark$		
Maitland Valley Conservation Authority		✓		
Marcus Maddalena, Huron County Biologist & Stewardship Coordinator	✓			

#### SUMMARY

It is recommended that Zoning By-law Amendment application Z03-21 be approved.

Sincerely,

Celinal Maliz-Ral

Celina Whaling-Rae Planner

Effect of Public and Agency Comments on Decision of Council to the Planning application (Pursuant to Sections 17, 22, 34, 35, 45, 51 and 53 of the Planning Act, RSO, 1990, as amended)

	A. Effect of Public Comments on Decision of Council	A. Effect of Agency Comments on Decision of Council (e.g. Planning, Public Works, Health Unit)
1. Council agrees with effects of input as contained in the planning report	Council concurs with the planning report regard on the decision.	ling the effect of public and agency comments
2. No comments received	No public comments were received on this application so there was no effect on the decision.	No agency comments were received on this application so there was no effect on the decision.
3. Supportive comments received	Public comments were received in support of the application, the effect of which resulted in a decision to approve the application.	Agency comments were received in support of the application, the effect of which resulted in a decision to approve the application.
4. Concerns raised were addressed through conditions to approval or changes to mapping or text amendment	Public comments were received on the issue(s) of The comments were address through (conditions to approval/changes to the mapping or text of the amendment).	Comments were received from agencies on the issues of The comments were addressed through (conditions to approval/changes to the mapping or text of the amendment).
5. Concerns raised did not influence the decision	Public comments were received on the issue(s) of Comments were thoroughly considered but the effect did not influence the decision of Council to (approve/deny) the application.	Comments were received from agencies identifying the issue(s) of Comments were thoroughly considered but the effect did not influence the decision of Council to (approve/deny) the application.
6. Concerns raised did influence the decision	Public comments were received on the issue(s) of, the effect of which influenced the decision of Council to (approve/deny) the application.	Agency comments were received on the issue(s) of, the effect of which influenced the decision of Council to (approve/deny) the application.
7. Comments received in support and opposition to the application	Options from above 1A/3A/4A/5A/6A	Options from above 1B/3B/4B/5B/6B
8. Other	Additional wording deemed appropriate by Council	Additional wording deemed appropriate by Council



#### **MEMORANDUM**

Florence Witherspoon, Clerk, Township of Ashfield-Colborne-Wawanosh, via email
Gerald Adam, applicant, via email
Marcus Maddalena, Biologist, County of Huron, via email
Celina Whaling-Rae, Planner, County of Huron, via email
Patrick Huber-Kidby, Environmental Planner/Regulations Officer, MVCA
February 23, 2021
Application for Zoning By-law Amendment: Z03-21 (ACW)
Front Concession NTP, Part Lot 24, Parcel J, Ashfield Ward, Township of
Ashfield-Colborne-Wawanosh, County of Huron

The Maitland Valley Conservation Authority (MVCA) has reviewed the above-noted application with respect to natural hazards in accordance with our Memorandum of Understanding with the County of Huron; and in accordance with our delegated responsibility for representing the "Provincial Interest" for natural hazards; and relative to MVCA policies made under *Ontario Regulation 164/06 (Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation)*. Based on our review, we offer the following comments.

It is our understanding the purpose of the zoning by-law amendment is to change a portion of the property from NE1 & NE1-1, to NE1-46 to permit a new cottage. It is further our understanding the lot was originally created and zoned to accommodate such a structure/use but rezoned subsequently.

#### Natural Hazards:

The subject property is situated on the lake Huron shoreline, and is subject to the associated flooding and erosion hazards.

MVCA has reviewed a geotechnical investigation conducted for this property. The report identifies a location to construct a cottage considered suitable in accordance with our policies for shoreline development.

#### **MVCA Regulated Lands:**

Lands located within the 100-year-erosion hazard, from the furthest off-shore extent inland to the 100-year-erosion hazard plus 15 metres, are regulated by the Maitland Valley Conservation Authority (MVCA). Subject to the regulation, any proposed development (construction, reconstruction, filling and/or site grading) interference and/or site alteration within MVCA's regulated area must be reviewed and approved by MVCA prior to any works beginning.

Based on a successful application, permission under *Ontario Regulation 164/06* has been issued to the applicant.

### **Recommendation:**

Based upon our review of the proposal for which this amendment is required MVCA has no objection to the Zoning By-law Amendment Z03-21 (ACW), it is in conformance with the Natural Hazard policies of the Provincial Policy Statement, 2020.

We have not received our \$240.00 fee for our review of this application. As such we will invoice the applicant directly.

Thank you for the opportunity to comment at this time.



Township of Ashfield-Colborne-Wawanosh 82133 Council Line, RR5 Goderich, ON N7A 3Y2 <u>www.acwtownship.ca</u> 519-524-4669

February 10, 2021 FILE: ACW Z03-21 Adam

# **Notice of Public Meeting**

For a Proposed Zoning By-law Amendment Application Planning Act, R.S.O. 1990, cP. 13., S. 34

A change is proposed in your neighbourhood. A Zoning By-law Amendment application has been received that, if approved, would re-zone a portion of the subject property to allow for the construction of a recreational residence and to provide relief from the minimum parking requirement in the ACW Zoning By-law.

You are being notified of this application because your name appears on the assessment roll for properties within 120 metres of the subject lands, or you are an agency requiring notice.

**You are invited to participate in an** <u>*online*</u> **Public Meeting on Tuesday, March 2, 2021 at 9:00 am.** During this time, the Township of Ashfield-Colborne-Wawanosh Council will be considering the change.



Owner/Applicant: Gerald Adam Location of Property: CON FRONT NTP PT LOT 24 (Ashfield) (MacKenzie Camp Road)

# The Proposed Change

The purpose and effect of the proposed Zoning By-law Amendment (Application # ACW Z03-21 Adam) is to to change the zoning on the subject property from NE1 & NE1-1 to NE1-46. This will result in the entire property being zoned NE1-46. The NE1-46 special zone would allow for the construction of a recreational residence and accessory buildings subject to the provisions of the LR1 zone (Section 16 of the ACW Zoning By-law). It would also exempt uses within the special zone from the minimum parking requirement outlined in the ACW Zoning By-law, due to spatial constraints.

Council of the Corporation of the Township of Ashfield-Colborne-Wawanosh considered this application to be complete on February 1, 2021. Maps showing the general location of the lands to which this Zoning By-law Amendment apply are shown in the draft by-law attached to this Notice.

# Learn More

Further information regarding this application can be found at <u>http://www.acwtownship.ca/property-development/planning-applications/</u>. Questions may be directed to the Planner Celina Whaling-Rae at <u>cwhalingrae@huroncounty.ca</u> or by phoning 519-524-8394 extension 3. Once the municipal office re-

opens, information about the application can also be obtained in-person between the hours of 8:30am and 4:00pm.

# Have Your Say

Any person may attend the public meeting and/or make written or verbal representation, either in support of, or in opposition to, the proposed zoning by-law amendment.

Comments and opinions submitted on this proposal, including the originator's name and address, become part of the public record, and may be viewed by the general public and may be published in a planning report and Council agenda.

- 1. You can submit comments, objections or concerns by mail (address above) or email to <u>clerk@acwtownship.ca</u>
- 2. You can speak during the online public meeting. \**Individuals are strongly encouraged to submit their comments prior to the meeting for consideration.*

# How to Access the Public Meeting

As a result of the COVID-19 Pandemic, the Township of Ashfield-Colborne-Wawanosh has closed the municipal office to the public. The Public Meeting will be held in electronic format.

You are entitled to attend this public meeting electronically to express your views about this application, or you may be represented by counsel for that purpose.

For information on how to participate in the Public Meeting, please visit the municipal website at <u>http://www.acwtownship.ca/council/council-agendas-4/</u>. Details on participating in the electronic meeting will be provided when the agenda is published at the end of the business day on the Friday before the meeting. If you have any questions regarding how to participate in the meeting, please phone the municipal office at 519-524-4669.

# Stay Informed

If you would like to be notified of the decision, you <u>must</u> make a written request to the Planning Advisory Committee at the municipal address above, or through email to <u>clerk@acwtownship.ca</u>. This will also entitle you to be advised of a possible Local Planning Appeal Tribunal hearing if the decision of this application is appealed.

# **Your Rights**

If a person or public body does not make oral submissions at a public meeting or make written submissions to the Township of Ashfield-Colborne-Wawanosh before the by-law is passed, the person or public body is not entitled to appeal the decision.

If a person or public body does not make oral submissions at a public meeting, or make written submissions to the Township of Ashfield-Colborne-Wawanosh before the by-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Local Planning Appeal Tribunal (LPAT) unless, in the opinion of the Tribunal, there are reasonable grounds to do so.

If you are receiving this notice because you are the owner of property in the area of the amendment that contains seven or more residential units, you must also post this notice in a location that is visible to all of the residents of your property.

# **Privacy Disclosure**

As one of the purposes of the Planning Act is to provide for planning processes that are open and accessible, all written submissions, documents, correspondence, e-mails or other communications (including your name and address) form part of the public record and will be disclosed/made available by the Township to such persons as the Township deems appropriate, including anyone requesting such information. Please note that by submitting any of this information, you are providing the Township with your consent to use and disclose this information as part of the planning process.

5.2

14.4



THE CORPORATION OF THE TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH

## BY-LAW NUMBER 18-2021

# **BEING A BY-LAW** to amend the Zoning By-law 32-2008 for the Township of Ashfield-Colborne-Wawanosh.

**WHEREAS** the Municipal Council of the Corporation of the Township of Ashfield-Colborne-Wawanosh considers it advisable to amend Zoning By-law 32-2008, as amended, of the Corporation of the Township of Ashfield-Colborne-Wawanosh and;

**NOW THEREFORE**, the Council of the Corporation of the Township of Ashfield-Colborne-Wawanosh enacts as follows:

- 1. This by-law shall apply to Front Concession NTP Part Lot 24 PCL;J (Ashfield), Township of Ashfield-Colborne-Wawanosh, as described and shown on the attached Schedules 1, 2, 3 & 4.
- By-law 32-2008 is hereby amended by changing on the attached Schedule 3 from 'Natural Environment (NE1)' and 'Natural Environment – Special (NE1-1)' to 'Natural Environment – Special (NE1-46),' the zone symbol on the lands designated 'zone change from NE1 (Natural Environment) and NE1-1 (Natural Environment – Special) to NE1-46 (Natural Environment – Special)'.
- 3. Section 18.5, Natural Environment Special Zones, is hereby amended by adding the following sub-section:

# <u>"NE1-46"</u>

Notwithstanding the provisions of the by-law to the contrary, those lands zoned NE1-46 may be used for one recreational residence and accessory buildings, subject to the provisions of the Section 16 (LR1 zone). Notwithstanding Section 3.26.1, no minimum parking requirement shall apply to any permitted uses within the NE1-46 zone. All other applicable provisions shall apply.

- 4. Section By-law 32-2008, is hereby amended by replacing Key Map 3A with a new Key Map 3A, as attached on Schedule 3, which is declared to be part of this by-law.
- 5. All other provisions of By-law 32-2008 shall apply.
- 6. This by-law shall come into force upon final passing, pursuant to Section 34(21) of the Planning Act, RSO 1990, as amended.

# Read a first and second time this 2<sup>nd</sup> day of March 2021.

Read a third time and finally passed this 2<sup>nd</sup> day of March 2021.

Glen McNeil, Mayor

Mark Becker, CAO/Deputy Clerk

## THE CORPORATION OF THE TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH BY-LAW NUMBER 18-2021 SCHEDULE 1

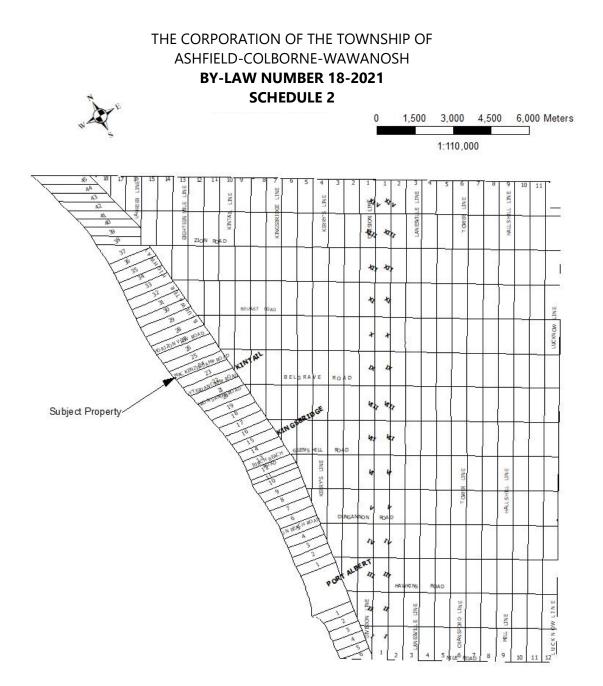
By-law 18-2021 has the following purpose and effect:

1. The zoning by-law (*application #: ACW Z03-21*) changes the zoning of Front Concession NTP Part Lot 24 PCL;J (Ashfield), Township of Ashfield-Colborne-Wawanosh.

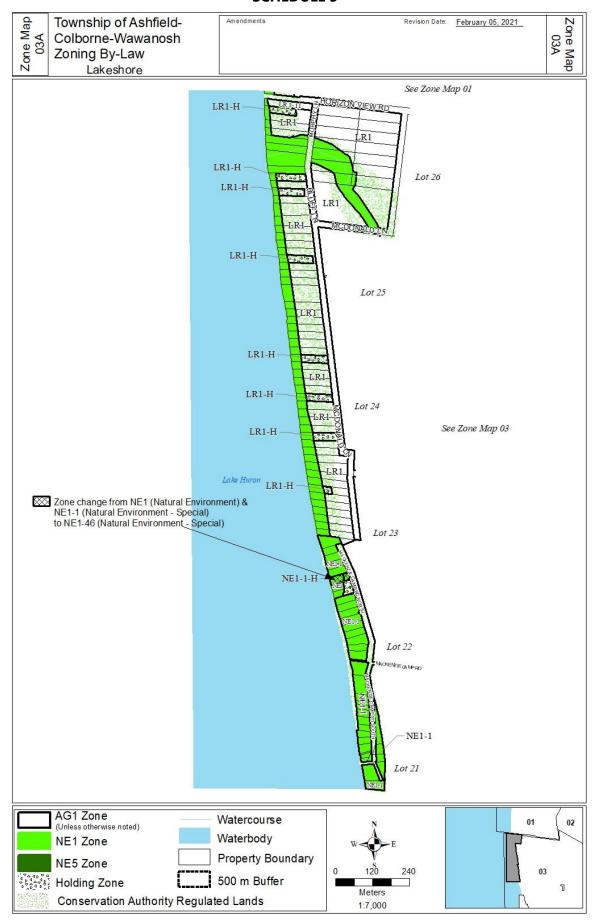
The purpose and effect of this Zoning By-law Amendment is to change the zoning of the property from 'Natural Environment (NE1)' and 'Natural Environment – Special (NE1-1)' to 'Natural Environment – Special (NE1-46)' to allow for the construction of a recreational residence and to provide relief from Section 3.26.1 of the ACW Zoning By-law, which requires that each single-detached residential use has a minimum parking requirement of 1 space per dwelling unit.

All other provisions of the Township of Ashfield-Colborne-Wawanosh Zoning By-law 32-2008 shall apply.

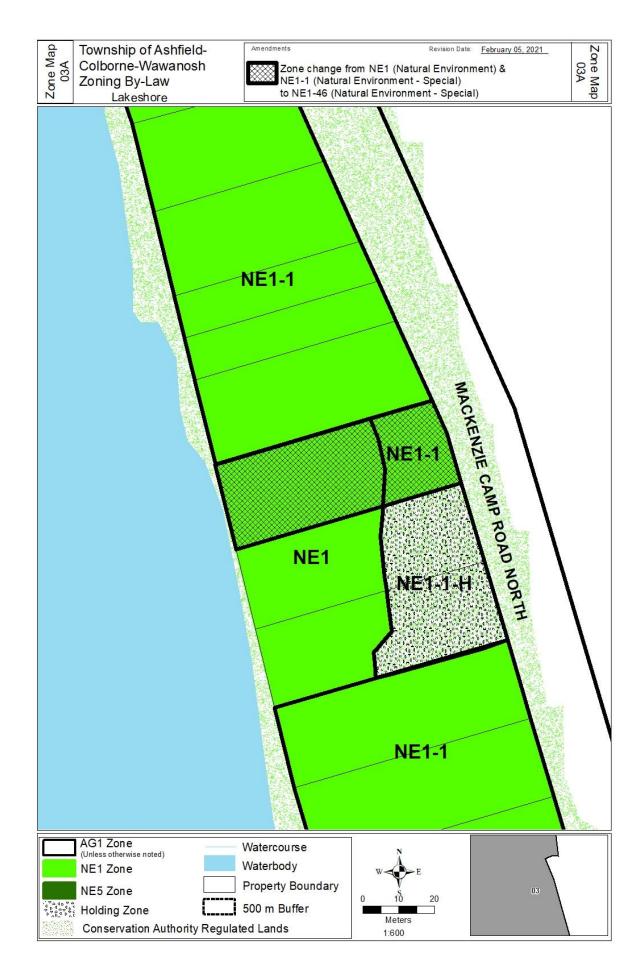
- 2. This by-law amends the Zoning By-law of the Corporation of the Township of Ashfield-Colborne-Wawanosh (32-2008).
- 3. The location map and key maps showing the location to which this by-law applies are found on the following pages and are entitled Schedule 2, 3 & 4.



# THE CORPORATION OF THE TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH BY-LAW NUMBER 18-2021 SCHEDULE 3



## THE CORPORATION OF THE TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH BY-LAW NUMBER 18-2021 SCHEDULE 4



	For office use only File #
	Received December 9, 20 20.
	Considered Complete, 20
MUNICIPALITY OF ACW	
Application for Official Plan and/or Zoni	ng By-law Amendment
	ng by law Amenament
A. THE AMENDMENT 1. TYPE OF AMENDMENT?	
Official Plan Amendment [ ] Zoning By-law Amendm	
2. WHAT IS THE PURPOSE OF AND REASONS FOR T	
To build a cottag	С
	)

B.	G	ENERAL INFORMATION
3.		PPLICANT INFORMATION
	a)	Registered Owner's Name(s):Gerry Adam
		Address: 320-1 Hurontacio Street
		Phone: Home (647) 883 - 02.15 Work (105 896 - 3434 Fax ( )
		Email: gorry-molam 2000 (a list ma: 1. COM. Cell (647) 883-0215
	b)	Applicant (Agent) Name(s):
		Address:
		Phone: Home ( Work ( Fax ( )
		Email: Cell ()
	c)	Name, Address, Phone of all persons having any mortgage, charge, debenture or encumbrance on the property:
	d)	Send Correspondence To? Owner [ ] Agent [ ] Other [ ]
4.	N	HAT AREA DOES THE AMENDMENT COVER?
	a)	[ 🖍] the "entire" property or
	b)	[ ] just a "portion" of the property
5.	Wa	rovide a description of the entire property: rd:Ashfield
		Address and Road Name: Mackenzie Camp Kd.
		Number (if available): 40 70 640 047 00700 0000
	Cor	cession: Registered Plan No.:
	Are	a: <u>1587 hectares</u> Depth: <u>65 metres</u> Frontage (Width): <u>24 metres</u>
		Sq.mt.
6.	l! If Y	S ANY OF THE LAND IN WELLHEAD PROTECTION AREA C? Yes 🗌 No 🗹 Unknown 🗌 es,
		ase obtain a Restricted Land Use Permit from the Risk Management Official. I <b>nknown</b> , please consult with your Municipal Planner and obtain a Restricted Land Use Permit if necessary.
7.	F	ROVIDE A DESCRIPTION OF THE AREA TO BE AMENDED IF ONLY A 'PORTION' OF THE PROPERTY:
	Are	a: hectares Depth: metres Frontage (Width): metres
8.	v	VHAT IS THE CURRENT PLANNING STATUS?
		Revised: March 2, 2020 T:\A\51\PD\PLANNERS\Planning Application Document
2   1:		Revised: March 2, 2020 T:\A\51\PD\PLANNERS\Planning Application Document

	Application for Of	ficial Plan &	/or Zoning By-law Amen
fficial Plan Designation	Natural	Enviro.	nment
oning: <u>NE</u>	1-1		
LIST LAND USES T	HAT ARE PERMITTED BY CU	RRENT OFFICIA	L PLAN DESIGNATION:
Conse	sruation		
EXISTING AND F	PROPOSED LAND USES	AND BUILDIN	IGS
WHAT IS THE "EXIS	STING" USE OF THE LAND?		
Va	reant		
ow long have the existing			
	posed' use of the LAND?		
	WING DETAILS FOR ALL BU	ILDINGS: (Use a	a separate page if necessary)
	ed to be built on the subject land:		
	Existing		Proposed
Type of Building(s)			Cottage.
Main Building Height			(m)
% Lot Coverage		//	
# of Parking Spaces			
# of Loading Spaces	and the second sec		
Number of Floors			2
Total Floor Area		(sq. m)	1920 sq.m
Ground Floor Area			
(exclude basement)	•		the MI Hangel
Building Dimensions			40 Al Longth x 24f
Date of Construction			Spring Zozl
Setback from Buildin			

# D. EXISTING AND PROPOSED SERVICES

									SAL:				
		Municipal <u>Water</u>	Communal <u>Water</u>	Private <u>Well</u>			nicipa <u>wers</u>		Communa <u>Sewers</u>		Priv <u>Sep</u> t		
	a) Existing	[]	[]	[]		[	[]		[ ]		[	]	
	b) Proposed	[ ]	[]	1/1		[	[ ]		[]		I	]	
	septic sy		ment would permi than 4500 litres o nt must submit:										
	[]	a servicing o	options report; and	ł									
	[]	a hydrogeol	logical report.										
3.	Will storm drai	nage be provide	ed by: Sewers	ĺ	]								
			Ditches	]	]								
			Swales	[	]								
			Other	[	] Spe	ecify							
	Is storm draina	age present or w	vill it be constructe	ed		-							
4.		•	CK APPROPRI	ATE SPA	CE)				municipal roa	d e	esconall	u maint	banic
		vincial highway						_	right of way	iu, si	casonan	y mant	ameu
		inty roads				-		-					
	mu	nicipai roads, m	aintained all year			-		_	water access				
		•	ENDMENT	not propos	ed).	-		_	water access				
	OFFICIA (Proceed to Secti DOES THE	L PLAN AM on F) if an Official E PROPOSED	ENDMENT I Plan Amendment is OFFICIAL PLAI		MEN				LOWING?	r .	1		
	OFFICIA (Proceed to Secti DOES THE Add a Land Us	L PLAN AMI on F) if an Official E PROPOSED e designation ir	ENDMENT I Plan Amendment is OFFICIAL PLAI In the Official Plan	N AMENI Ye	SMEN	ţ	No [	]	<b>LOWING?</b> Unknown	-	-		
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	OFFICIA (Proceed to Secti DOES THE Add a Land Us Change a Land Change a polic Replace a polic	L PLAN AMI on F) if an Official E PROPOSED the designation in I Use designation cy in the Official cy in the Official	ENDMENT I Plan Amendment is OFFICIAL PLAI In the Official Plan I Plan I Plan	N AMENI Ye an Ye Ye Ye	DMEN s[] s[] s[] s[]	1 1 1 1	No [ No [ No [ No [	] ] ]	LOWING? Unknown Unknown Unknown Unknown	[ [ [	] ] ]		
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15.	OFFICIA (Proceed to Secti DOES THE Add a Land Us Change a Land Change a polic Replace a polic Delete a polic Add a policy in	L PLAN AMI on F) if an Official E PROPOSED te designation in Use designation cy in the Official cy in the Official y in the Official n the Official Pla	ENDMENT Plan Amendment is OFFICIAL PLAN the Official Plan on in the Official Pl Plan I Plan Plan	N AMENI Ye an Ye Ye Ye Ye Ye	S     ]       s     ]       s     ]       s     ]       s     ]       s     ]	1 1 1 1 1 1	No [ No [ No [ No [ No [	] ] ]	LOWING? Unknown Unknown Unknown Unknown Unknown Unknown	[ [ [ [	] ] ] ]		
5.	OFFICIA (Proceed to Secti DOES THE Add a Land Us Change a Land Change a polic Replace a polic Delete a polic Add a policy ir	L PLAN AMI on F) if an Official <b>E PROPOSED</b> the designation in Use designation cy in the Official cy in the Official on the Official Pla <b>ABLE AND K</b>	ENDMENT I Plan Amendment is OFFICIAL PLAN In the Official Plan In in the Official Pl I Plan I Plan Plan	N AMENE Ye an Ye Ye Ye Ye Ye	DMEN s [ ] s [ ] s [ ] s [ ] s [ ] s [ ] ts [ ]	t TION, F	No [ No [ No [ No [ No [	] ] ] ] ]	LOWING? Unknown Unknown Unknown Unknown Unknown ETHE FOLLO	] [ [ ]	] ] ] ]		
5.	OFFICIA (Proceed to Secti DOES THE Add a Land Us Change a Land Change a polic Replace a polic Delete a polic Add a policy ir IF APPLIC a) Section N	L PLAN AMI on F) if an Official E PROPOSED the designation in Use designation cy in the Official cy in the Official on the Official Plan ABLE AND K Sumber(s) of Pol	ENDMENT I Plan Amendment is OFFICIAL PLAN In the Official Plan In the Official Plan I Plan I Plan Plan I NOWN AT TIME	N AMENE Ye an Ye Ye Ye Ye Ye	S       ]         S       ]         S       ]         S       ]         S       ]         S       ]         S       ]         S       ]         S       ]         S       ]         S       ]         S       ]         LICA	tion, F	No [ No [ No [ No [ No [	] ] ] ] /ID	LOWING? Unknown Unknown Unknown Unknown Unknown ETHE FOLLO	       	] ] ] ]		
<u>=</u> . 15.	OFFICIA (Proceed to Secti DOES THE Add a Land Us Change a Land Change a polic Replace a polic Delete a polic Add a policy ir IF APPLIC a) Section N b) Text of th	L PLAN AMI on F) if an Official PROPOSED the designation in Use designation in Use designation cy in the Official cy in the Official on the Official Plan ABLE AND K Sumber(s) of Pol-	ENDMENT I Plan Amendment is OFFICIAL PLAN In the Official Plan In the Official Plan I Plan I Plan I Plan I NOWN AT TIME licy to be Changed w policy attached o	A AMENE Ye an Ye Ye Ye Ye a OF APP	S       ]         s       ]         s       ]         s       ]         s       ]         s       ]         s       ]         s       ]         s       ]         s       ]         s       ]         ate pa	TION, F	No [ No [ No [ No [ No [ No [ Yes [	] ] ] ] /ID	LOWING? Unknown Unknown Unknown Unknown Unknown E THE FOLLO	] ] ] ] ]	] ] ] ]NG:		
15.	OFFICIA (Proceed to Secti DOES THE Add a Land Us Change a Land Change a polic Replace a polic Delete a polic Add a policy ir IF APPLIC a) Section N b) Text of th	L PLAN AMI on F) if an Official PROPOSED the designation in Use designation in Use designation cy in the Official cy in the Official on the Official Plan ABLE AND K Sumber(s) of Pol-	ENDMENT I Plan Amendment is OFFICIAL PLAN In the Official Plan In the Official Plan I Plan I Plan Plan I NOWN AT TIME	A AMENE Ye an Ye Ye Ye Ye a OF APP	S       ]         s       ]         s       ]         s       ]         s       ]         s       ]         s       ]         s       ]         s       ]         s       ]         s       ]         ate pa	TION, F	No [ No [ No [ No [ No [ No [ Yes [	] ] ] ] /ID	LOWING? Unknown Unknown Unknown Unknown Unknown E THE FOLLO	] ] ] ] ]	] ] ] ]NG:		

## 17. LIST PURPOSE OF AMENDMENT AND LAND USES THAT WOULD BE PERMITTED BY THE PROPOSED AMENDMENT:

18.	. Does the requested amendment alter a new area of settlement in a municipality		poundary of an are	a of settlement i	n a municipality or establish
	Yes [ ]	No [ ]			
		ch the current officia n area of settlement		y, dealing with t	he alteration or establishme
19.	. Does the requested amendment remov Yes [ ]	e the subject land fro No [ ]	om any area of em	oloyment?	
		h the current officia of employment.	l plan policies, if an	y, dealing with t	he removal of land from an
20.	<ul> <li>Is the requested amendment consistent v</li> <li>Yes [ ]</li> </ul>	with the Provincial P No [ ]	olicy Statement iss Unknown [ ]	ued under Sectic	on 3 (1) of the Planning Act.
<u>F.</u>	ZONING BY-LAW AMENDME (Proceed to Question 29 (Drawing) if a Zoning B		not proposed).		
21.	DOES THE PROPOSED ZONING I Add or change zoning designation in the 2		Yes	No[]	Unknown [ ]
	Change a zoning provision in the Zoning I	By-law	Yes [ ]	No [	Unknown [ ]
	Replace a zoning provision in the Zoning	1.1.1 · · · · · · · · · · · · · · · · ·	Yes	No[]	Unknown [ ]
	Delete a zoning provision in the Zoning B		Yes [ ]	No [	Unknown [ ]
	Add a zoning provision in the Zoning By-la		Yes [	No[]	Unknown [ ]
22.	<ul> <li>IF APPLICABLE AND KNOWN AT</li> <li>a) Section Number(s) of provisions to b</li> </ul>		APPLICATION,	PROVIDE THI	E FOLLOWING:
	<ul> <li>b) Text of the proposed new provision a</li> <li>c) New zone name:</li> </ul>			No[]	
	d) Map of proposed new Key Map attac	hed on a separate p	age? Yes[]	No[]	
23.	011 10	amendment. creational			
	- date the current owner acquired the su	bject land	1988		
24.	HAS THERE BEEN A PREVIOUS APPLICATI SUBJECT PROPERTY:	ON FOR REZONING	UNDER SECTION 3	4 OF THE PLANN	ING ACT AFFECTING THE
	Yes [ ]	No [1]			
5   11	11	Revised: March 2,	2020	T:\A\51\PD\PLANN	ERS\Planning Application Documen

25. Is the intent of this application to implement an alteration to the boundary of an area of settlement or to implement a new area of settlement?

Yes[] No[V]

If yes: Attach details of the official plan or official plan amendment that deals with the matter.

26. Is the intent of this application to remove land from an area of employment?

Yes [ ] No [ 🗸 ]

If yes: Attach details of the official plan or official plan amendment that deals with the matter.

27. Is the application for an amendment to the zoning by-law consistent with provincial policy statement issued under Section 3 (1) of the Planning Act.

Yes [ V ] No [ ]

### [] Unknown[]

## G. SKETCH CHECKLIST

28. ACCURATE, TO SCALE, DRAWING OR PROPOSAL: (In the space below or on a separate page(s), please provide drawing of the proposal, preferably prepared by a qualified professional. In some cases, it may be more appropriate to prepare additional drawings at varying scales to better illustrate the proposal).

The application shall be accompanied by a clean, legible sketch sharing the following information. Failure to supply this information will result in a delay in processing the application.

A sketch showing in metric units:

- a) the boundaries and dimensions of the subject land;
- b) the location, size and type of all existing and proposed buildings and structures on the subject land, indicating their distance from the front lot line, rear lot line and side lot lines;
- c) the approximate location of all natural and artificial features (for example, buildings, railways, roads, watercourses, drainage ditches, banks of rivers or streams, wetlands, wooded areas, wells and septic tanks) that,
  - i) are located on the subject land and on land that is adjacent to it, and
  - ii) in the applicant's opinion may affect the application;
- d) the current uses of land that is adjacent to the subject land;
- e) the location, width and name of any roads within or abutting the subject land, indicating whether it is an unopened road allowance, a public traveled road, a private road or a right of way;
- f) if access to the subject land will be by water only, the location of the parking and docking facilities to be used;
- g) the location and nature of any easement affecting the subject land

#### The drawing(s) should show (please use a survey if available):

- Property boundaries and dimensions
- Dimensions of area of amendment
- Distance from structures to lot lines
- Easements or restrictive covenants
- Building dimensions & location
- Neighbouring adjacent land uses
- Parking and loading areas

.....

- Use of Neighbouring properties
- Public roads, allowances, rights of way
- Municipal Drains/Award Drains

- Wetlands, floodplain, wet areas
- Woodlots, forested areas, ANSI's, ESA's
- Driveways and lanes
- Other features (bridges, wells, railways, septic systems, springs, slopes, gravel pits)
- Natural watercourses
- North arrow

## H. OTHER RELATED PLANNING APPLICATIONS

29. HAS THE APPLICANT OR OWNER MADE APPLICATION FOR ANY OF THE FOLLOWING, EITHER ON OR WITHIN 120 METRES OF THE SUBJECT LAND?

Official Plan Amendment	Yes	]	No [1]
Zoning By-law Amendment	Yes [	]	No [ V]
Minor Variance	Yes (	]	No [ V]
Plan of Subdivision	Yes [	]	No [ 🖌 ]
Consent (Severance)	Yes [	]	No [ 1
Site Plan Control	Yes [	]	No [ 1

### 30. IF THE ANSWER TO QUESTION 29 (above) IS YES, PLEASE PROVIDE THE FOLLOWING INFORMATION:

File No. of Application:	
Approval Authority:	
Lands Subject to Application:	
Purpose of Application:	
Status of Application:	
Effect on the Current Application for Amendment:	

## I. OTHER SUPPORTING INFORMATION

### 31. PLEASE LIST THE TITLES OF ANY SUPPORTING OR ATTACHED DOCUMENTS:

(e.g. Environmental Impacts Study, Hydrogeological Report, Traffic Study, Market Area Study, Aggregate License Report, Stormwater Management Report etc. It is recognized that the applicant meet with planning staff to attempt to determine the supporting documents that will be required).

## J. PRE-SUBMISSION CONSULTATION

**32.** Applicants are strongly encouraged to contact the County and speak/meet with the Planner to the Municipality before submitting an application for information.

Date of Applicant's consultation meeting with County Planner: \_\_\_\_

Has the Planner advised the Applicant that this application needs to be reviewed by the Huron County Stewardship Coordinator for comments on Natural Heritage matters. Yes 🗹 (submit a fee of \$212.00 made payable to the Treasurer, County of Huron) 👘 No 🗔

## K. PUBLIC CONSULTATION STRATEGY

# 33. PLEASE OUTLINE YOUR PROPOSED STRATEGY FOR CONSULTING WITH THE PUBLIC WITH RESPECT TO THIS AMENDMENT REQUEST:

(e.g. individual contact, hold a neighbourhood meeting, telephone conversation, letter explaining proposal & inviting questions/comments, website/internet, etc.).

## L. AUTHORIZATION FOR AGENT/SOLICITOR TO ACT FOR OWNER;

(If affidavit (K) is signed by an Agent/Solicitor on Owner's behalf, the Owner's written authorization below <u>must</u> be completed).

Revised: March 2, 2020

I (we) \_\_\_\_\_\_ of the \_\_\_\_\_\_ of \_\_\_\_\_County/Region

of \_\_\_\_\_\_\_to act as my agent in the application.

Signature of Owner(s)

Date

## M. APPLICANT'S DECLARATION

(This must be completed by the Person Filing the Application for the proposed development site.)

City of Mississanga of the Derin Peel

solemnly declare that all of the statements contained in this In the Region/County/District application and supporting documentation are true and complete, and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by virtue of the "Canada Evidence Act."

Please be advised the responsibility for filing a complete application rests solely with the owner/applicant. Anything not requested or applied for in this application and subsequently found to be necessary (which may require another application(s) and fee(s)) are the sole responsibility of the owner/applicant. The County/Municipality will address only the application as applied for, and any items that are not included in the application are not the responsibility of the County/Municipality.

All studies required to support this application shall be at the expense of the applicant and included at the time of submission as a complete application. Where the County/Municipality incurs costs for the peer review of any consultants' reports or fees for legal opinions, the County/Municipality will be reimbursed such costs by the applicant.

In the event of third-party appeals to applications approved by the County/Municipality, the applicant may be responsible for some or all of the legal and other costs incurred by the County/Municipality, at the discretion of the County/Municipality.

Revised: March 2, 2020

Signature

**DECLARED** before me at: Region/County/District

In the Municipality of

1010 Commissioner of Oaths

Please Print name of Applicant

Nov23/2020 Date

Signature of Commissioner

## N. OWNER/APPLICANT'S CONSENT DECLARATION

In accordance with the provisions of the <u>Planning Act</u>, it is the policy of the County Planning Department to provide the public access to all development applications and supporting documentation.

In submitting this development application and supporting documentation, I \_\_\_\_\_\_\_\_ the owner/the authorized applicant, hereby acknowledge the above-noted policy and provide my consent, in accordance with the provisions of the Municipal Freedom of Information and Protection of Privacy Act, that the information on this application and any supporting documentation provided by myself, my agents, consultants and solicitors, will be part of the public record and will also be available to the general public.

I hereby authorize the County of Huron staff, Municipal staff and council members of the decision making authority to access to the subject site for purposes of evaluation of the subject application.

Signature

Date

### APPLICATION AND FEE OF \$

### \_ RECEIVED BY THE MUNICIPALITY

If comment fees are required for the Huron Stewardship Coordinator to review this application, (see Section J:Pre-Submission Consultation). please collect a fee of \$212.00 made payable to the Treasurer, County of Huron.

. . .. .. . . . . . . . . . .

## COMPLETE THIS FORM TO DETERMINE IF SEPTIC COMMENTS ARE REQUIRED ON YOUR PLANNING APPLICATION

For certain planning applications, comments are required from local municipal staff to assist the municipality in its decision on your application. This sheet will determine if comments are required from staff, and if so, the appropriate fee\* must be submitted with your application and paid to the local municipality (\*based on the local municipality's Fee Schedule - consult your Planner to determine).

Name of Applicant: \_\_\_\_\_

Name of Owner (if different from the applicant):

Location of Property (Lot, Concession or Registered Plan, and Municipality):

Type of Planning Application(s) submitted with this form:

Consent (severance) Minor Variance

Zoning By-Law Amendment Plan of Subdivision/Condominium

Official Plan Amendment

Please answer Section A or Section B, depending on the type of servicing available. In the following question, "property" means the subject property or, in the case of a severance, each of the resulting lots.

Section A - Where SANITARY SEWERS are available.

Is the property within 183 metres (600 feet) of an abattoir (slaughter house)?	🗆 Yes	🗆 No
Section B - Where SEPTIC SYSTEMS are required.		
The application is for the creation of a new lot for which the primary use will be a new dwelling (other than a new dwelling on a farm).	🗆 Yes	
Is the property less than .4 hectares (1 acre) in area?	🗆 Yes	🗆 No
Does the property have less than .2 hectares (1/2 acre) of "useable land" for a septic tank and tile bed? See definition of "useable land" below.	□ Yes	🗆 No
I am uncertain of the location of the existing septic tank and tile bed on the property.	🗆 Yes	🗆 No
There will be more than one dwelling unit on each lot.	🗆 Yes	🗆 No
An industrial or commercial use is proposed which will require a septic system.	🗆 Yes	D No
Is the property with 183 metres (600 feet) of an abattoir (slaughter house)?	🗆 Yes	🗆 No
The application is for a new Plan of Subdivision/Condominium	□ Yes	🗆 No

The application is for a new Plan of Subdivision/Condominium

Proceed to Section C.

"Useable Land" means an area of land with suitable original soil for the installation of a Class 4 subsurface sewage disposal system, free of any buildings, structures swimming pools, etc. and such land is or will be used solely for a septic tank and tie bed and any future replacement of the tile bed, and which area is at least 3 metres (10 feet from any property line, at least 15 metres (15 feet) from a top-of-bank of a watercourse or lake, not located in a flood plain, not located in an environmentally sensitive area, and does not contain field tile or other artificial drainage. (other restrictions may apply according to legislation.)

Name of Owner or Designated Agent

Signature and Date

To be completed by Municipal Clerk: Has the Septic Review Fee, made payable to the local municipality, been collected from the applicant? \*Please note type of application and file # on the cheque.

□ Yes No Amount: \_\_\_\_\_

Name of Clerk-Treasurer



### **PLANNING & DEVELOPMENT** 5.3 57 Napier Street, Goderich, Ontario N7A 1W2 CANADA

Phone: 519.524.8394 Ext. 3 Fax: 519.524.5677 Toll Free: 1.888.524.8394 Ext. 3

www.huroncounty.ca

### **Consent Application Report – File C12/21** To Ashfield-Colborne-Wawanosh Council

Owner/Applicant: Bill Vanstone
--------------------------------

Date: February 24, 2021

Property Address: N/A

Property Description: Concession 2 ED, Part Lot 1, RP 22R4682 Part 1, Colborne, Ashfield-Colborne-Wawanosh

Recommendation: That provisional consent be:

- ✓ granted with conditions (attached)
- \_\_\_\_ deferred
- \_\_\_\_\_ denied (referred to the County Committee of the Whole Day 1 for a decision)

Purpose:

- enlarge abutting lot
- ✓ create new lot
- surplus farm dwelling
- right-of-way / easement
- other:

	Area	Official Plan Designation:	Zoning:	Structures:
Severed	3642 square metres (0.9 acres)	Village/Hamlet	'Village/Hamlet Residential – Low Density (VR1)'	Vacant
Retained #1	3642 square metres (0.9 acres)	Village/Hamlet	'Village/Hamlet Residential – Low Density (VR1)'	Vacant
Retained #2	2306.7 square metres (0.57 acres)	Village/Hamlet	'Village/Hamlet Residential – Low Density (VR1)'	Vacant

Review: This application:

- Is consistent with the Provincial Policy Statement (s. 3(5) Planning Act);
- ✓ Does not require a plan of subdivision for the proper and orderly development of the municipality (s.53(1) Planning Act);
- Conforms with section 51(24) of the Planning Act;
- <u>√</u> √ Conforms with the Huron County Official Plan;
- √ √ Conforms with the Ashfield-Colborne-Wawanosh Official Plan;
- Complies with the Ashfield-Colborne-Wawanosh Zoning By-law (or will comply subject to a standard condition of rezoning or minor variance);
- Has been recommended for approval by the local municipality; and
- ✓ Has no unresolved objections/concerns raised (to date) from agencies or the public. (Applications that do not meet all of the foregoing criteria will be referred to the County Committee of the Whole Day 1 for a decision)

### Agency / Other Comments:

	Not	No	Concerns	See Conditions / Comment
	Received	Concerns		
Neighbours	✓			
ACW Staff		~		There is an existing Development Agreement on file for the subject property. A Holding Symbol is recommended until such time the agreement is updated.

Huron County Public Works	~		
Municipality of Central Huron	$\checkmark$		

# Figure 1: Sketch of Proposal

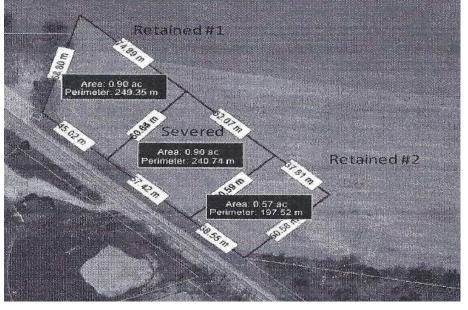


Figure 2: Aerial of Subject Property (severed in red, Retained #1 in green, Retained #2 in yellow)





Figure 3: Aerial of Subject Property Demonstrating Dimensions when Merging Takes Place

### **Additional Comments:**

This consent application was submitted for the purpose of creating new lots through infill. The applicant is proposing to sever the middle of the subject property in order to create three conveyable lots to be used for residential purposes.

The total size of the subject property is 2.37 acres. It is designated Village/Hamlet, and is zoned 'Village/Hamlet Residential – Low Density'. The severed parcel, and the parcel identified as Retained #1 in Figure 1, are 3642 square metres in size. The parcel identified as Retained #2 in Figure 1 is 2306.7 square metres in size. As per the conditions of approval for Consent Application C90/20, Retained #2 will be merged on title with the parcel served through C90/20, demonstrated in Figure 3. This will ensure each lot has adequate space to support private septic systems, as per the recommendation of the hydrogeologist who conducted a nitrate study for the proposal.

The property is considered an area of archaeological potential, given its close proximity to the Maitland River. A Stage 2 Archaeologist Assessment was completed on site. No findings were discovered, and no further work was deemed necessary.

No comments on the subject application were received from members of the public, Huron County Public Works, or the Municipality of Central Huron.

There is a Development Agreement on file for the adjacent property that was signed between the applicant and the Township in 2001. This agreement stipulates that a building permit may not be issued for the property until:

- a lot grading and drainage plan;
- a site plan for future lots is submitted;
- entrance permits are obtained
- septic system permits are issued; and
- water servicing is addressed.

The ACW Building Department has confirmed they have no objections to the subject application, but are requesting that a Holding symbol be placed on all three parcels until the Development Agreement is updated.

The ACW Official Plan directs new development to designated areas, including the subject property. The proposed parcels are of a size that creates lots of an efficient size to appropriately handle private

servicing for residential purposes. It is recommended that this application be approved, subject to the recommended conditions.

# **Recommended Conditions**

## Expiry Period

 Conditions imposed must be met within one year of the date of notice of decision, as required by Section 53(41) of the Planning Act, RSO 1990, as amended. If conditions are not fulfilled as prescribed within one year, the application shall be deemed to be refused. Provided the conditions are fulfilled within one year, the application is valid for two years from the date of the notice of decision.

## **Municipal Requirements**

- 2. All municipal requirements be met to the satisfaction of the Township including servicing connections if required, cash-in-lieu of park dedication, property maintenance, compliance with zoning by-law provisions for structures, compliance with Section 65 of the Drainage Act and any related requirements, financial or otherwise.
- 3. The sum of \$250.00 to be paid to the municipality as cash-in-lieu of parkland.

## Survey / Reference Plan

- 4. Provide to the satisfaction of the County and the Township:a) a survey showing the lot lines of the severed parcel and the location of any buildings thereon, and
  - b) a reference plan based on the approved survey.

### Zoning

5. Where a violation of any municipal zoning by-law is evident, the appropriate minor variance or rezoning shall be obtained to the satisfaction of the Township.

### Other

6. A –h Holding symbol be placed on both the severed and retained parcels until the existing Development Agreement has been updated to the satisfaction of the Township.

Sincerely,

Celinal Maliz-Ral

Celina Whaling-Rae Planner



PLANNING & DEVELOPMENT 57 Napier Street, Goderich, Ontario N7A 1W2 CANADA Phone: 519.524.8394 Ext. 3 Fax: 519.524.5677 Toll Free: 1.888.524.8394 Ext. 3 www.huroncounty.ca

## NOTICE OF AN APPLICATION FOR CONSENT FOR SEVERANCE

DATE: February 12, 2021

File #C12-2021

TO:

- Owner/Applicant: Bill Vanstone
- Florence Witherspoon, Clerk Township of Ashfield-Colborne-Wawanosh
- □ Sarah Louise McGregor, Building Administrative Assistant Township of Ashfield-Colborne-Wawanosh
- Brett Pollock, CBO Township of Ashfield-Colborne-Wawanosh
- Municipality of Central Huron (abutting within 1 km of subject property)
- Huron County Public Works
- Celina Whaling-Rae, Planner, Huron County Planning Department

Enclosed is a copy of an application for Consent for your review and comments to the Huron County Planning & Development Department.

### LOCATION OF PROPERTY

Township: Ashfield-Colborne-Wawanosh Lot: Concession 2 ED, Part Lot 1, RP 22R-4682, Part 1, Colborne Ward Address: Londesboro Road Owner/Applicant: Bill Vanstone Solicitor: Troyan & Fincher

### PURPOSE AND EFFECT

The purpose and effect of this application is for creation of new lots. This application is concurrent with Severance File C90-2020 for a lot addition. The proposed vacant land to be severed is approximately 0.9 acres. The vacant retained land #1 is approximately 0.9 acres and the vacant retained land #2 is approximately 1.11 acres (0.57 acres in Application #C12-2021 and 0.54 acres in Application C90-2020).

### LAST DAY FOR RECEIVING COMMENTS

We would appreciate your comments by **February 26, 2021** as to whether or not your department or agency has any comments to this severance and whether or not any conditions should be imposed. All comments should be addressed to the Attention of Lisa Finch, Land Division Administrator at the following by e-mail address <u>lfinch@huroncounty.ca</u> or by regular mail to the address above and to the Attention of Lisa Finch, Land Division Administrator. We will assume you have no objections to the application if no comments are received by the time specified. If this does not provide you with sufficient opportunity to consider the application, please advise.

## **DECISION AND APPEAL**

If you wish to be notified of the decision in respect to the proposed consent, you must make a written request to the Huron County Planning & Development Department c/o Ms. Lisa Finch, Land Division Administrator, Huron County Consent Granting Authority at 57 Napier Street, 2<sup>nd</sup> Floor, Goderich, Ontario, N7A 1W2.



"Planning with the community for a healthy, viable and sustainable future."

If a person or public body, that files an appeal of a decision in respect of the proposed consent, does not make written submission to the Huron County Planning Department before it gives or refuses to give a provisional consent, then the Local Planning Appeal Tribunal may dismiss the appeal.

### **ADDITIONAL INFORMATION**

Further information regarding this application will be available to the public for inspection by electronic means or via mail request to:

Huron County Planning & Development Department 57 Napier Street, 2<sup>nd</sup> Floor, Goderich, Ontario N7A 1W2 Attention: Lisa Finch, Land Division Administrator

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# **APPLICATION FOR CONSENT**

For office use only		ciala
Received	Feb 4	, 20 21
Considered Complete	FEBB	,2021

## 1. PRE-SUBMISSION CONSULTATION

Applicants are <u>strongly</u> encouraged to contact the County and speak/meet with the Planner assigned to the Municipality before submitting an application.

Date of Applicant's consultation meeting with County Planner assigned to Municipality: January 2021

## 2. APPLICATION INFORMATION

Name of Applicant	Name of Owner
BIL DANSTONE.	
	Check box if same as Applicant
Contact Information	Contact Information
Address: 8/2/6 LUCKNOW LINE	Address:
Town: GODERICH	Town:
Postal Code: <u>N7A + 3</u> Y/	Postal Code:
Home Phone: <u>519 524 7</u> 743	Home Phone:
Cell:519 524 0585 Work:	Cell: Work:
Email: Billy U49@Live. Com	Email:
Fax:	Fax:
a) Solicitor name (if known)	
Address:	
Tel:Email:	
Correspondence to be sent to: $\Box$ all parties, or	🕅 applicant, and\or 🛛 🗍 owner
b) Name, Address, Phone of all persons having any mor	tgage, charge, debenture or encumbrance on the

b) Name, Address, Phone of all persons having any mortgage, charge, debenture or encumbrance on the property:



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# **APPLICATION FOR CONSENT**

3.	LOCATION OF THE	SUBJECT PROPERTY	SEVERED & RETAINED	(Complete applicable lines)
----	-----------------	------------------	--------------------	-----------------------------

Municipality: <u>Ashfield-Colborne-Wawanosh</u> <sub>Ward:</sub> Colborne	Concession: <u>2 ED</u> Lot Number(s): <u>Part Lot 1</u>	
Registered Plan:	Lot(s) Block(s):	
Reference Plan: 22R4682	Part Number(s):	
Municipal Address (911 number and street/road name):	Roll # (if available): 407031000201302	

a) Are there any right-of-way easements or restrictive covenants affecting the severed or retained land?

🗌 Yes 🛛 🗖 No

b) If Yes, describe the location of the right-of-way or easement or covenant and its effect:

c) Is	any of the severed	l or retained land i	n Wellhead Protection	n Area A, B or C?	🗌 Yes	🔳 No	Unknown
-------	--------------------	----------------------	-----------------------	-------------------	-------	------	---------

### If yes, please obtain a Restricted Land Use Permit from the Risk Management Official.

If **Unknown**, please consult with your Municipal Planner and obtain a Restricted Land Use Permit if necessary.

d) Is the subject property systematically tiled? If yes, please submit tile maps with your application. DYes ENO

## 4. PURPOSE OF THE APPLICATION

### Type of proposed transaction:

Transfer:	Other:
Creation of a new lot Addition to lot	□ Charge □ Lease
🗌 An easement	Correction of title
Other purpose (please specify):	

Briefly, describe the proposed transaction:

Severance to create three conveyable lots

Name(s) of person(s), if known, to which land or interest in land is to be transferred, leased or charged:

If a surplus severance, provide legal description and locations of other farm holdings of owner/purchaser:

If creating a lot addition, identify the lands to which parcel will be added.

Municipality:	Ward:
Concession:	Lot Number(s):
Registered Plan:	Lot(s)/Block(s):
Reference Plan:	Part Number(s):
Municipal Address (911 number and street/road name):	Roll # (if available):

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### 5. DESCRIPTION OF SUBJECT LAND

#### a) Description land intended to be severed:

Frontage: 57.4 metres

Depth: 60.6 metres

Area: 0.9 acres/3642 square metres

Existing Use(s): Vacant

Proposed Use(s): Residential

Existing Building(s) or Structure(s)

None

### b) Type of access:

(Check appropriate box)

existing building(s) or structure(s)
 provincial highway
 county road
 municipal road, maintained all year
 municipal road, seasonally maintained
 other means (please specify)

c) **Type of water supply proposed**: (Check appropriate box)

publicly owned and operated piped water system

privately owned and operated individual well
dug drilled

Dprivately owned and operated communal well

□ lake or other water body

□other means (please specify)

#### d) Type of sewage disposal proposed:

(Check appropriate box)

publicly owned & operated sanitary sewage system

privately owned & operated individual septic tank

□ privately owned & operated communal septic system

Dprivy

□other means (please specify

# **APPLICATION FOR CONSENT**

a) Description land intended to be retained:
Frontage: #1: 45 metres / #2: 38.5 metre
Depth: #1:68.8 metres / #2: 60.5 metres
Area: #1: 0.9 acres / #2: 0.57 acres +0.54 acres
Existing Use(s): Vacant
Proposed Use(s): Residential
Existing Building(s) or Structure(s)
None
b) Type of access:
(Check appropriate box)

existing building(s) or structure(s)
 provincial highway
 county road
 municipal road, maintained all year
 municipal road, seasonally maintained
 other means (please specify)

c) Type of water supply proposed: (Check appropriate box)

Dublicly owned and operated piped water system

privately owned and operated communal welllake or other water body

□other means (please specify)

#### d) Type of sewage disposal proposed:

(Check appropriate box)

- Dublicly owned & operated sanitary sewage system
- privately owned & operated individual septic tank

privately owned & operated communal septic
 system

□privy

□other means (please specify

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## 6. LAND USE

- a) What is the existing Official Plan designation of the property? Settlement Area
- b) What is the zoning of the property? VR1
- c) Are any of the following uses or features on the subject land or on adjacent land, within 500 metres of the subject land?

	On Subject Land	<b>On Adjacent Land</b> Within 500 metres of the Subject Land?		
Use of Feature	Please indicate: <b>Yes / No</b>	Yes / No	Please indicate: <b>Metres</b>	
An agricultural operation, including livestock facility or stockyard	No	No		
A landfill	No	No		
A sewage treatment plant or waste stabilization plant	No	No		
A provincially significant wetland (Class 1, 2 or 3 wetland)	No	No		
Flood plain	No	No		
A rehabilitated mine site	No	No		
A non-operating mine site within 1 km of the subject land	No	No		
An active mine site	No	No		
An industrial or commercial use (specify the use[s])	No	No		
A former industrial or commercial use	No	No		
An active railway line	No	No		
A municipal airport	No	No		
An underground storage tank or buried waste	No	No		
A current Environmental Site Assessment for the site or has one been prepared within the last 5 years. If Yes, please submit with application.	No	No		

Please respond Yes or No to each use or feature

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7.	HIS	TORY OF THE PROPERTY		
	a)	Has the subject land ever been the subject of an application for approval of a plan of sub Section 51 of the planning Act or a consent under Section 53 of the Planning Act?	division u	nder
	۵	Yes 🗏 No 🗌 Unknown		
		If Yes, and known, provide file number of the application and the decision made on the a	pplicatio	n.
		File Number:		
		Decision:		
		If this application is a re-submission of a previous consent application, describe how it ha from the original application.	s been ch	anged
	c)	Is the subject land reserved for either manure applications under the Nutrient Managem agreement submitted to the municipality?	ent Plan d	or manure
8.	P	PROVINCIAL POLICY		
		Is the application consistent with the Provincial Policy Statement issued under Section 3 ( Act? ■Yes □No □Unknown	(1) of the	Planning
9.	٨	IATURAL HERITAGE		
	a)	Does this application need to be reviewed by the Huron County Biologist for comments o matters? (based on direction from Planner.) Yes (submit a fee of \$212.00 made payable to: Treasurer, County of Huron) No	n Natura	l Heritage
	Plea	EPTIC SYSTEM REVIEW use answer <u>Section A</u> OR <u>Section B</u> , depending on the type of servicing available. i <b>on A</b> Where <b>SANITARY SEWERS</b> are available:		
	ls t	he property within 183 meters (600 feet) of an abattoir? (slaughter house)	□Yes	■No
	Sect	ion B – Where SEPTIC SYSTEMS are available:		
		e application is for the creation of a new lot for which the primary use will be a new relling (other than a new dwelling on a farm).	<b>■</b> Yes	□No
		e severed parcel contains a residence or other building(s) serviced by an on-site sewage stem?	□Yes	No
	lf y	you answered <b>Yes</b> : is the on-site sewage system older than 5 years of age?	□Yes	□No
		you answered <b>Yes</b> : has the on-site sewage system been inspected by a licensed ntractor within the past 3 years?	□Yes	□No
		If you answered <b>Yes</b> : you are required to provide a certificate of inspection with your application.		
		If you answered <b>No</b> : you will be required to have an inspection carried out and provide a certificate of inspection as a condition of consent (severance) approval.		
	ls t	he property less than .4 hectares (1 acre) in area?	🔳 Yes	□No
	-			

Does the property have less than .2 hectares (1/2 acre) of "useable land"\* for septic tank and tile bed? See definition of "usable land" below

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# **APPLICATION FOR CONSENT**

\* "Usable Land" means an area of land with suitable original soil for the installation of a Class 4 subsurface sewage disposal system, free of any buildings, structures, swimming pools, etc. and such land is or will be used solely for a septic tank and tile bed and any future replacement of the tile bed, and which area is at least 3 metres (10 feet) from any property line, at least 15 metres (50 feet) from any drilled well, at least 30 metres (100 feet) from any dug well, at least 15 metres (50 feet) from any top-of-bank of a watercourse or lake, not located in a flood plain, not located in an environmentally sensitive area, and does not contain field tile other artificial drainage. (Other restriction may apply according to legislation).

Note: Consult with your Municipal Planner to confirm if the application requires comments for a septic system review and to confirm if there is an applicable fee to be submitted with the application (all fees for septic system review will be payable to the Municipality)

#### 11.SKETCH CHECKLIST

The application shall be accompanied by a clean, legible sketch showing the following information. Failure to supply this information will result in a delay in processing the application.

Please do not use pencils for completing sketch as they do not copy well.

Please check the boxes indicating that your sketch provides the following information:

Doundaries and dimensions of the land that is to be severed and the part that is to be retained;

□ boundaries and dimensions of any land owned by the owner of the subject land that abuts the severed and retained land;

□ distance between the subject land and the nearest township lot line and/or landmark, such as a railway crossing or bridge;

□location of all land previously severed from the parcel;

□ location of all wells, including abandoned wells, on neighbouring properties within 30m of lot lines of both the severed and retained lands subject to this consent application;

□ location of all natural and artificial features in the subject land and adjacent lands such as railways, roads, watercourses, drainage ditches, field drains, river or stream banks, wetlands, wooded areas and the location and nature of any easement affecting the subjectland;

□ location of all buildings, wells, abandoned wells and all components of a sewage system (i.e. septic tanks and weeping beds) on the severed and retained lands, and the distance of each to the proposed new lot line;

existing uses on adjacent land such as residential, agricultural and commercial uses;

□ location of beach access - if the property is a recreational property, adjacent to or in proximity to the waterfront;

□location and nature of any easements affecting the property;

U whether sewage disposal will be provided by a publicly owned and operated sanitary sewage system, a privately owned and operated individual or communal septic system, a privy or other means.

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### 12. APPLICANT'S/OWNER'S DECLARATION

(This must be completed by the **Person Filing the Application** for the proposed development site.)

I, <u>ISII</u> UANSTONE. of the TWP OF ACW. (Name of Town, Municipality, etc.)

In the Region/County/District <u>Hureon</u> solemnly declare that all of the statements contained in this application and supporting documentation are true and complete, and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by virtue of the "Canada Evidence Act." I hereby acknowledge and accept the requirements and costs referred to the in Noteslisted.

#### NOTES:

Please be advised the responsibility for filing a complete application rests solely with the owner/applicant. Anything not requested or applied for in this application and subsequently found to be necessary (which may require another application(s) and fee(s)) are the sole responsibility of the owner/applicant. The County/Municipality will address only the application as applied for, and any items that are not included in the application are not the responsibility of the County/Municipality.

All studies required to support this application shall be at the expense of the applicant and included at the time of submission as a complete application. Where the County/Municipality incurs costs for the peer review of any consultants' reports or fees for legal opinions, the County/Municipality will be reimbursed such costs by the applicant.

In the event of third-party appeals to applications approved by the County/Municipality, the applicant may be responsible for some or all of the legal and other costs incurred by the County/Municipality, at the discretion of the County/Municipality.

DECLARED before me at:

Region/County/District

In the Municipality of <u>14E TOWNSHIPOF ASHFHELD</u>- OUL BURNE-WAWANDSH

This (Day)

\_\_\_\_, <u>202</u>\_\_\_\_\_ (Year) \_\_\_\_day of \_\_\_\_\_\_(Month)

Signature

Please Print Name of Applicant

Mark Becker, CAO/Deputy-Clerk Township of Commissioner of Oaths Commissioner of Oaths Commissioner for taking Oaths etc.

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### 13. OWNER/APPLICANT'S CONSENT DECLARATION

In accordance with the provisions of the <u>Planning Act</u>, it is the policy of the County Planning Department to provide the public access to all development applications and supporting documentation.

In submitting this development application and supporting documentation,

I Canceronic Cancero

I hereby authorize the County of Huron staff, municipal staff and council members of the decision making authority to have access to the subject site for purposes of evaluation of the subject application.

If the application is deemed incomplete, the applicant has 60 days to provide the necessary information. After 60 days has lapsed, the application and fee will be mailed back to the applicant.

Signature

VANSTONE

Print Name

OWNER Title

Where the owner is a firm or corporation, the person signing this section shall complete one or more of the following (please check):

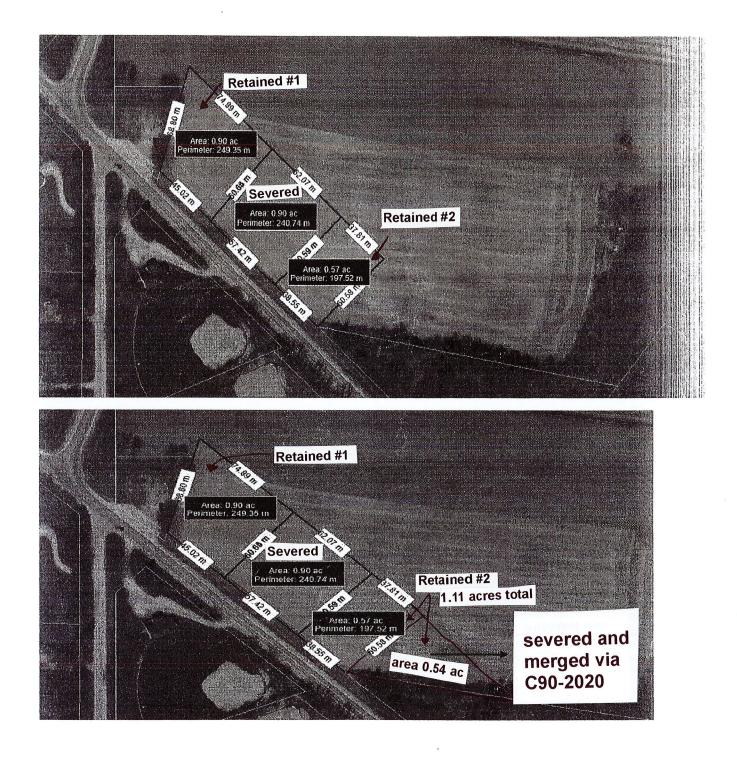
XI have the authority to bind the corporation.

Affixed is the corporate seal.

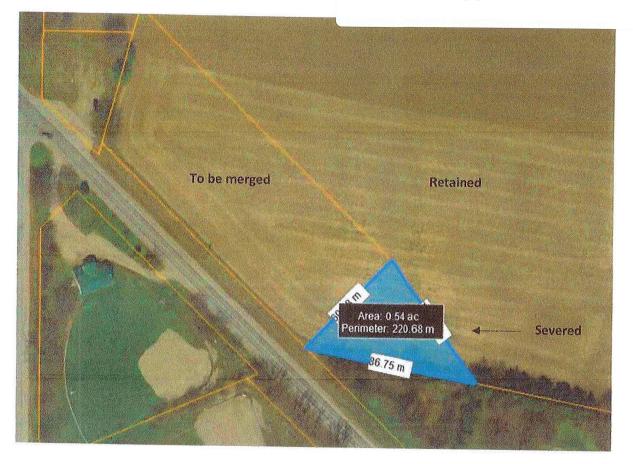
Updated October 21, 2020

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# C90-2020 Vanstone Severance Application



# **VEOLIA WATER**

# Ashfield-Colborne-Wawanosh Monthly Summary

# Month: January 2021

# **Benmiller**:

Item	Number	Comments
Adverse Samples	0	
Non-compliances	0	
Equipment issues:		<ul> <li>Maintenance Activities Completed</li> <li>Ran Auto dialer and Generator tests.</li> <li>Cleaned the Cl17 analyzer and the Injector and replaced duckbills.</li> <li>Checked the eyewash bottle, fire extinguisher, emergency lighting, well house building, spill containment and the day tank</li> </ul>
General Information:		Vehicles are checked Monthly – licenses/Ins. /safety kits up to date and on/in vehicles and any maintenance deemed necessary.
Alarms		Date: Alarm: No Alarms
Main breaks/Leaks		Date: Type:
Power outages		Date:
Shut-off / Turn-on / Complaints		Shut-off: Turn-on: Complaint:

7.1.1

# **VEOLIA WATER**

# Ashfield-Colborne-Wawanosh Monthly Summary

# Month: January 2021

# **Century Heights:**

Item	Number	Comments
Adverse Samples		
Non-compliances		
Equipment issues:		Maintenance Activities Completed         • Verified and cleaned UV Reactors 1 and 2         • Ran Auto dialer and generator tests         • Cleaned Cl2 and replaced duckbills, Cl17 and Turbidity Analyzers cleaned         • Checked well house building, eyewash station, spill containment and day tank.         • Checked pressure tanks #1 thru #10:
		#'s 2,5 and 8 are new in 2020 #'s 6,7 and 9 have minor corrosion #'s 1,3,4 and 10 have significant corrosion and recommend replacement
General Information:		Vehicles are checked Monthly – licenses/Ins. /safety kits up to date and on/in vehicles and any maintenance deemed necessary.
Alarms		Date: Alarm:
Main breaks/Leaks		Date: Type:
Power outages		Date:
Shut-off / Turn-on / Complaints		Shut-off: Turn-on: Complaint:

# **VEOLIA WATER** Ashfield-Colborne-Wawanosh Monthly Summary

# Month: January 2021

# Dungannon:

Item	Number	Comments
Adverse Samples		
Non-compliances		
Equipment issues:		<ul> <li>Maintenance Activities Completed</li> <li>Cleaned Cl17 analyzer, Cl2 Injector and NaSi Injectors and replaced duckbills</li> <li>Changed Analyzer reagents</li> <li>Ran Auto dialer and Generator tests</li> <li>Cleaned spill containment and day tank.</li> <li>Replaced stenner pump tubing</li> <li>Checked eyewash station</li> <li>Checked pressure tanks #'s 1, 2, 3 and 4</li> </ul>
General Information:		Vehicles are checked Monthly – licenses/Ins. /safety kits up to date and on/in vehicles and any maintenance deemed necessary.
Alarms		Date: Alarm: Jan 17 <sup>th</sup> Cl2 warning
Main breaks/Leaks		Date: Type:
Power outages		Date: 12 <sup>th</sup> Hydro Interruption
Shut-off / Turn-on / Complaints		Shut-off: Turn-on: Complaint:

# **VEOLIA WATER**

# Ashfield-Colborne-Wawanosh Monthly Summary

# Month: January 2021

# **Huron Sands:**

Item	Number	Comments
Adverse Samples		
Non-compliances		
Equipment issues:		Maintenance Activities Completed
General Information:		Shut down for Season November 16 <sup>th</sup>
Alarms		Date: Alarm:
Main breaks/Leaks		Date: Type:
Power outages		Date:
Shut-off / Turn-on / Complaints		Shut-off: Turn-on: Complaint:

# **VEOLIA WATER** <u>On-Going Items / Recommendations:</u>

There were approximately 3 locates in ACW

# \* All sites being sanitized weekly as per COVID19 protocol\*

**Dungannon:** 

**Benmiller:** 

**Century Heights:** 

UV replacement is in the works

# **Huron Sands:**

Shut down for season

Completed by: Sarah Telford Quality Assurance and Compliance Specialist Veolia Water Canada



# Annual Report

# Benmiller Drinking Water System 2020 Operation and Maintenance **Annual Report**

7.1.2 a)

# PREPARED BY

Veolia Water 100 Cove Rd. Goderich, ON N7A 3Z2

# TO

Township of Ashfield-Colborne-Wawanosh, 82133 Council Line, R.R.#5, Goderich, ON N7A 3Y2



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# **1.0 INTRODUCTION AND BACKGROUND**

The purpose of the 2020 Annual Report is to document the operation and maintenance data for the Benmiller Drinking Water System for review by the Ministry of Environment, Conservation and Parks in accordance with O. Reg. 170/03. This report covers January 1, 2020 to December 31, 2020. A copy of this report will be submitted to the owner to be uploaded to the township's website and can be supplied to interested parties upon request.

# 2.0 DESCRIPTION OF WATER SYSTEM

The Benmiller Drinking Water System (DWS **# 220007588**), is characterized as a "secure ground water" system and is classified as a small municipal residential system. The system consists of one well with a rated capacity of 196 m3/day, with chlorination treatment. The entire system is located on Concession 1, Part Lot 1, Eastern Division of Ashfield-Colborne-Wawanosh Township. The distribution system serves the community of Benmiller with a population of approximately 60 residents, with approximately 22 customer services, and a 47 guest room Inn and a Community Hall.

The system consists of a Limited Drinking Water System, which is owned by the Township of Ashfield-Colborne-Wawanosh and operated by Veolia Water Canada, the Operating Authority.

Well # 2 was put into service in January 2016, replacing # 1 well. It is a 150 mm drilled well, 70.1 m deep, originally drilled as a monitoring well in 2006. Well # 2 is equipped with a submersible vertical turbine pump rated at 2.5 L/s at 56.4 m TDH.

The well house is equipped with a well pump, flow restrictor limiting flow to 2.27 litres/second, back-up diesel generator, chlorinators, a chlorine contact reservoir, on-line monitoring and alarm generation and auto-dialer.

Back-up power is supplied by one 20 KW, 25 kVA diesel standby generator with automatic transfer switch and 340 L double wall sub-base fuel tank, all installed in an external weatherproof and acoustic enclosure on a concrete pad.

The well house and its equipment have a daily maximum capacity to deliver 196 cubic metres of potable water per day to the Benmiller community. The current water source is one secure deep bedrock well. The well is located on the well house site with a dedicated raw water main feeding the well house.

The water from the well is pumped to a chlorine contact / storage reservoir (7.6 m x 4.6 m x 3.8 m deep) to provide adequate chlorine contact time at maximum flow and before the first consumer, complete with a sampling / service water connection feed back to the pump house.

The well house is monitored by an alarm dialer and is equipped with a data logger that tracks chlorine residuals on the treated water.

The attached distribution system is constructed with a combination of galvanized steel and PVC piping with polyethylene services.

There is no elevated storage to maintain pressure and the system pressure is maintained using pressure tanks and 3 pressure pumps.

The system has no fire hydrants and lacks the capacity to provide fire flows.

Disinfection is achieved on the Benmiller well supply through the use of 6% sodium hypochlorite. In the well house this chemical is added prior to the water entering the chlorine contact reservoir at dosages high enough to achieve both primary and secondary disinfection objectives.

The chlorine dosages range varies with the chlorine demand of the raw water.

The free chlorine residual is monitored at the point of entry to the distribution system, by an on-line chlorine analyzer, with a target residual of > 1.00 mg/l and < 1.30 mg/l.

The Benmiller well supply has 1 PTTW (Permit To Take Water) #3180-BJKPVH issued December 27, 2019, with an expiry date of December 13, 2029, which allows 196 cubic metres per day to be pumped from the well.

The Benmiller Drinking Water System (treatment Subsystem) has maximum flows as specified in the Municipal Drinking Water Licence (MDWL) 080-104 and Drinking Water Works Permit (DWWP) 080-204 Issue #4. The maximum total daily flow is 196 cubic meters per day.

The treated water is monitored by an on-line chlorine analyzer.

Distribution piping typically ranges in size from 50 mm to 100 mm, and consists of galvanized or PVC piping, with polyethylene service connections.

A 100 mm diameter discharge water main outside the pump house supplies treated water to the Benmiller Estates Subdivision, and two 50 mm discharge water main supply treated water to the Benmiller Inn.

Typical system pressure ranges from 40 P.S.I to 60 P.S.I.

# 3.0 SUMMARY OF WATER QUALITY MONITORING

# 3.1 Water Treatment Equipment Operation and Monitoring

### 3.1.1 Point of Entry Chlorine Residual

Chlorine residuals are continuously measured using a HACH CL17 online chlorine analyzer (8760 samples were taken) and verified for accuracy using a hand-held HACH pocket colorimeter. **Table 1** shows the monthly average of free chlorine residual values on the treated water at the point of entry.

# 3.1.2 Distribution Chlorine Residual

Chlorine residuals in the distribution system are checked daily using a HACH pocket colorimeter. In 2020, 366 distribution chlorine residuals were recorded.

Date	Average Treated Chlorine Residual (mg/L)	Average Distribution Chlorine Residual (mg/L)
Jan	1.25	1.12
Feb	1.27	1.15
Mar	1.25	1.14
Apr	1.30	1.19
Мау	1.30	1.13
Jun	1.27	1.15
Jul	1.29	1.17
Aug	1.25	1.13
Sep	1.32	1.17
Oct	1.23	1.13
Nov	1.22	1.15
Dec	1.32	1.21
Average	1.27	1.15
Min	1.23	0.20
Мах	1.32	1.46
# Samples	366	366

Table 1. – Treated and Distribution Chlorine Residuals for Benmiller Drinking Water System

# 3.1.3 Turbidity

Turbidity is measured using a HACH pocket turbidimeter. The maximum turbidity measured in the treated water was 0.71 NTU.

Table 2 provides a summary of raw and treated turbidity results.

Date	Average Raw Turbidity (NTU)	Average Treated Turbidity (NTU)
Jan	0.69	0.51
Feb	0.74	0.47
Mar	0.79	0.49
Apr	0.53	0.46
Мау	0.57	0.46
Jun	0.58	0.49
Jul	0.63	0.49
Aug	0.65	0.50
Sep	0.60	0.48
Oct	0.51	0.49
Nov	0.39	0.43
Dec	0.57	0.45
Average	0.60	0.48
Min	0.33	0.24
Мах	0.81	0.71
# Samples	28	280

Table 2. - Raw and Treated Water Turbidities for Benmiller Drinking Water System

# 3.2 Microbiological Sampling

#### 3.2.1 Raw Water Samples

Raw water samples are taken every two weeks. In 2020 a total of **26** samples were collected and analyzed for E. Coli and Total Coliforms. Each E. Coli and Total Coliform sample results were 0 cfu/100 ml in the raw water. **Table 3** provides a summary of bacteriological results performed on the raw water.

		E. Coli					
Date	# Samples	# Samples 0	# Samples ≥1	S	# amples	# Samples 0	# Samples ≥1
Jan	2	2	0		2	2	0
Feb	2	2	0		2	2	0
Mar	3	3	0		3	3	0
Apr	2	2	0		2	2	0
Мау	2	2	0		2	2	0
Jun	2	2	0		2	2	0
Jul	2	2	0		2	2	0
Aug	2	2	0		2	2	0
Sep	3	3	0		3	3	0
Oct	2	2	0		2	2	0
Nov	2	2	0		2	2	0
Dec	2	2	0		2	2	0
Total	26	26	0		26	26	0

 Table 3. – Microbiological Results for Raw Water at Benmiller Drinking Water System

# 3.2.2 Treated Water (Point of Entry) Samples

One treated water sample from the point of entry is taken every two weeks and analyzed for E.Coli, Total Coliforms and for Heterotrophic Plate Count (HPC). A total of 26 E.Coli and Total Coliforms water samples were collected and analyzed for the above parameters. Each E. Coli and Total Coliform test result from the treated water was 0 cfu/100 ml. The range of HPC results were 0 - <10 cfu/100 ml.

Table 4 provides a summary of all bacteriological results performed on treated water.

	E. Coli			Total Coliform				HPC			
Date	# Samples	# Samples 0	# Samples ≥1	# Samples	# Samples 0	# Samples ≥1		# Samples	Safe	Deteriorating	
Jan	2	2	0	2	2	0		2	2	0	
Feb	2	2	0	2	2	0		2	2	0	
Mar	3	3	0	3	3	0		3	3	0	
Apr	2	2	0	2	2	0		2	2	0	
Мау	2	2	0	2	2	0		2	2	0	
Jun	2	2	0	2	2	0		2	2	0	
Jul	2	2	0	2	2	0		2	2	0	
Aug	2	2	0	2	2	0		2	2	0	
Sep	3	3	0	3	3	0		3	3	0	
Oct	2	2	0	2	2	0		2	2	0	
Nov	2	2	0	2	2	0		2	2	0	
Dec	2	2	0	2	2	0		2	2	0	
Total	26	26	0	26	26	0		26	26	0	

#### Table 4. – Microbiological Results for Point of Entry at Benmiller Drinking Water System

#### 3.2.3 Distribution System

Distribution samples are collected every two weeks and tested for E.Coli, Total Coliform and for Heterotrophic Plate Count (HPC). In 2020, a total of 27 distribution samples were collected and analyzed for the above parameters. All E. Coli and Total Coliform results from the treated water were 0 cfu/100 ml. The range of HPC results were 0 - <10 cfu/100 ml.

 Table 5 provides a summary of all bacteriological samples taken in the distribution system.

	E.Coli			Te	Total Coliform				HPC			
Date	# Samples	# Samples 0	# Samples ≥1	# Samples	# Samples 0	# Samples ≥1		# Samples	Safe	Deteriorating		
Jan	2	2	0	2	2	0		2	2	0		
Feb	2	2	0	2	2	0		2	2	0		
Mar	3	3	0	3	3	0		3	3	0		
Apr	2	2	0	2	2	0		2	2	0		
Мау	3	3	0	3	3	0		2	2	0		
Jun	2	2	0	2	2	0		2	2	0		
Jul	2	2	0	2	2	0		2	2	0		
Aug	2	2	0	2	2	0		2	2	0		
Sep	3	3	0	3	3	0		3	3	0		
Oct	2	2	0	2	2	0		2	2	0		
Nov	2	2	0	2	2	0		2	2	0		
Dec	2	2	0	2	2	0		2	2	0		
Total	27	27	0	27	27	0		26	26	0		

# Table 5. – Microbiological Results for Benmiller Distribution System

#### 3.3 Chemical Sampling & Testing

#### 3.3.1 Inorganics

One treated water sample is taken every 60 months and tested for inorganics. The most recent samples for the Benmiller Drinking Water System were collected on June 21, 2016 and submitted to the laboratory for analysis of inorganics as listed in Schedule 23. All parameters were found to be within compliance. Inorganics will be sampled and analyzed again on or before June 21, 2021.

Results from 2016 can be found in Table 6.

Parameter	Result (µg/L)	Maximum Allowable Concentration (µg/L)		
Antimony	0.02	6		
Arsenic	3.1	10		
Barium	85.7	1000		
Boron	85	5000		
Cadmium	<0.03	5		
Chromium	0.36	50		
Mercury	<0.01	1		
Selenium	<0.04	10		
Uranium	0.586	20		

Table 6. – Schedule 23	Results for Benmiller	Drinking Water System
------------------------	-----------------------	-----------------------

**NOTE:** The previous standard of 25µg/L changed January 2018, to the new standard of 10µg/L for Arsenic. The last sample taken in 2016 was within compliance at that time, the result was 3.1µg/L.<u>The next sample is required before</u> <u>June 21, 2021</u>. Consideration and discussion of this parameter should be investigated.

### 3.3.2 Lead

Schedule 15.1 of Ontario Regulation 170/03 requires that samples be taken during two seasons: once between December 15 and April 15 and once between June 15 and October 15. The Maximum Allowable Concentration for Lead is 0.01 mg/L. In the two previous lead sampling seasons lead, pH, lead and alkalinity samples were taken on January 22, 2020 and August 19, 2020. Lead is not required to be tested again until 2021.

2020 results can be found in Table 7.

	Lead (mg/L)	рН	Alkalinity (mg/L)
Dec-Apr	0.23	7.83	209
Jun-Oct	0.52	8.09	206

Table 7. – Lead Sampling Program Results for Benmiller Drinking Water System

#### 3.3.3 Organics

One treated water sample is taken every 60 months and tested for schedule 24 organic parameters. The most recent samples were collected on June 21, 2016. All parameters were found to be within compliance. Organics will be sampled and analyzed again on or before June 21, 2021.

2016 sample results can be found in Table 8.

Table 8. - Schedule 24 Results for Benmiller Drinking Water System

Parameter	Result (µg/L)	Maximum Allowable Concentration (µg/L)
Benzene	<0.32	1
Carbon Tetrachloride	<0.16	2
1,2-Dichlorobenzene	<0.41	200
1,4-Dichlorobenzene	<0.36	5
1,1-Dichloroethylene	<0.33	14
1,2-Dichloroethane	<0.35	5
Dichloromethane	<0.35	50
Monochlorobenzene	<0.3	80
Tetrachloroethylene	<0.35	30
Trichloroethylene	<0.43	50
Vinyl Chloride	<0.17	1
Diquat	<1	70
Paraquat	<1	10
Glyphosate	<1	280
Polychlorinated Biphenyls	< 0.04	3
Benzo(a)pyrene	< 0.004	0.01
2,4-dichlorophenol	<0.15	900
2,4,6-trichlorophenol	<0.25	5
2,3,4,6-tetrachlorophenol	<0.20	100
Pentachlorophenol	<0.15	60
Alachlor	<0.02	5
Atrazine+N-dealkylated metabolites	< 0.01	5
Atrazine	< 0.01	-
De-ethylated atrazine	< 0.01	-
Azinphos-methyl	< 0.05	20
Carbaryl	< 0.05	90
Carbofuran	< 0.01	90
Chlorpyrifos	< 0.02	90
Diazinon	< 0.02	20
Dimethoate	< 0.03	20
Diuron	< 0.03	150
Malathion	< 0.02	190
Methoxychlor	< 0.01	900
Metolachlor	< 0.01	50
Metribuzin	< 0.02	80
Phorate	< 0.01	2
Prometryne	< 0.03	1
Simazine	< 0.01	10

# Annual Report For the 2020 Operating Year

Terbufos	<0.01	1
Triallate	<0.01	230
Trifluralin	<0.02	45
2,4-dichlorophenoxyacetic acid	<0.19	100
Bromoxynil	<0.33	5
Dicamba	<0.20	120
Diclofop-methyl	<0.40	9
MCPA	<0.00012	0.00012
Picloram	<1	190

# 3.3.4 Trihalomethanes and Haloacetic Acids

One distribution sample is taken every three months and tested for Trihalomethanes (THMs) and Haloacetic Acids (HAAs). In 2020, samples were collected during the months of February, May, August and November. The Ontario Drinking Water Quality Standard (ODWQS) has set a Maximum Allowable Concentration (MAC) of 100  $\mu$ g/L for THMs and it is expressed as a running annual average. In 2019, the average THM was found to be 5.35  $\mu$ g/L, which is within compliance. Benmiller Well currently has THM relief.

The new HAA MAC is now 80 µg/L.

Refer to Table 9. for the summary of trihalomethane and haloacetic acid results.

3.3.5 Nitrate & Nitrite

One treated water sample is taken every three months and tested for nitrate and nitrite. In 2020, samples were collected during the months of February, May, August and November. The Ontario Drinking Water Quality Standard (ODWQS) have set a Maximum Allowable Concentration (MAC) of 1 mg/L for nitrites and 10 mg/L for nitrates. The results were found to be within compliance.

Refer to Table 9.

	Nitrate		Nitrite		TH 20		HAAs	
Date	# Samples	Result (mg/L)	# Samples	Result (mg/L)	# Samples	Result (µg/L)	# Samples	Result (µg/L)
Feb	1	<0.006	1	<0.003	1	5.6	1	<5.3
Мау	1	<0.006	1	<0.003	1	5.6	1	<5.3
Aug	1	<0.006	1	<0.003	1	4.4	1	<5.3
Nov	1	<0.006	1	<0.003	1	5.6	1	<5.3
Total	4		4		4		4	
Average		<0.006		<0.003		5.35		<5.3
Maximum		<0.006		<0.003		5.60		<5.3

### Table 9. – Nitrate, Nitrite, THM and HAA Results at Benmiller Drinking Water System

#### 3.3.6 Sodium

One treated water sample is collected every 60 months and tested for Sodium. O. Reg 170/03 has set a Maximum Acceptable concentration (MAC) of 20 mg/L for Sodium which requires the Medical Office of Health be notified if the concentration exceeds the MAC. These samples were last collected on June 21, 2016 and were found to be 18.2 mg/L, which is within compliance. The next water sample for Sodium will be collected and analyzed on or before June 21, 2021.

#### 3.3.7 Fluoride

One treated water sample is collected at least once every 60 months and tested for Fluoride. The Ontario Drinking Water Quality Standards (ODWQS) have set a MAC of 1.5 mg/L. On August 22, 2017 and August 25, 2017 a sample was collected for this analysis. The samples were both found to have a concentration of 1.84 mg/L, which is greater than the MAC. This is due to high levels of naturally occurring fluoride in the aquifer. For more information see: http://www.acwtownship.ca/wordpress/wp-content/uploads/2013/09/Benmiller.pdf. The next water sample for Fluoride will be collected and analyzed on or before August 25, 2022.

# 4.0 WATER AND CHEMICAL USAGE

# 4.1 Chemical Usage

From January 1, 2020 to December 31, 2020. 42.77 kg of sodium hypochlorite was used to ensure proper disinfection in the distribution system with an average dosage of 2.95 mg/L. Refer to **Table 10**.

	Sodium Hypochlorite				
Date	Usage (kg)	Average Dosage (mg/L)			
Jan	2.26	2.64			
Feb	2.55	2.78			
Mar	3.37	2.67			
Apr	3.64	2.78			
Мау	4.12	2.97			
Jun	5.25	2.75			
Jul	3.93	2.83			
Aug	4.72	3.12			
Sep	4.07	3.14			
Oct	3.22	3.18			
Nov	2.67	3.11			
Dec	2.98	3.24			
Total	42.77				
Average		2.95			

Table 10. – Chemical Usage at Benmiller Drinking Water System

#### 4.2 Annual Flows

A summary of the water supplied to the distribution system in 2020 is provided in **Table 11.** This Table provides a breakdown of the monthly flow provided to the distribution system.

Flow meters were calibrated on September 11, 2020 by Indus Control and were found to be acceptable.

Date	Average Daily Flow (m³)	Maximum Daily Flow (m³)	Total Monthly Flow (m³)
Jan	27.65	52	857
Feb	31.66	55	918
Mar	40.61	66	1259
Apr	43.63	68	1309
May	44.65	65	1384
Jun	46.67	110	1400
Jul	59.77	92	1853
Aug	48.74	74	1511
Sep	43.13	68	1294
Oct	33.00	55	1013
Nov	29.00	52	857
Dec	30.00	58	918
Average	40		
Мах		110	
Total			14,573

Table 11. - Treated Water Flows for Benmiller Drinking Water System

# 5.0 IMPROVEMENTS TO SYSTEM AND ROUTINE AND PREVENTATIVE MAINTENANCE

The following summarizes water system improvements and routine and preventative maintenance for the Benmiller Drinking Water System:

- Spring flushing of the distribution system occurred from May 11th -13th.
- Fall flushing of the distribution system occurred in October.
- Annual Generator Inspection by Sommers in January (maintenance required)

# 6.0 MINISTRY OF THE ENVIRONMENT INSPECTIONS AND REGULATORY ISSUES

The most recent inspection conducted by The Ministry of Environment, Conservation and Parks was completed by Matt Shannon on May 8, 2020.

There were no non-compliances noted. The Inspection Rating was 100%.

There were no instances of adverse water quality. There was one PBWN on April 30th to repair a water line.

# 7.0 MECP Regulatory Changes

It should be noted that there will be some upcoming changes to Ontario Regulation 170/03 and Ontario Regulation 169/03 that strengthen standards and clarify testing requirements as follows:

- Strengthen standards for Arsenic, Carbon Tetrachloride, Benzene, and Vinyl Chloride;
- Adopt new standards for Chlorate, Chlorite, 1-Methyl-4-Chlorophenoxyacetic acid (MCPA) and Haloacetic Acids (HAAs); (NOTE: Chlorate and Chlorite testing is only required for Municipal Drinking Water Systems using Chlorine Dioxide treatment equipment.)
- Clarify/optimize testing, sampling and reporting requirements for Trihalomethanes (THMs) and HAAs; and
- Remove 13 pesticides from testing requirements.

The aforementioned amendments will be phased in over the next four years to allow system owners and/or operators the opportunity to collect baseline information and complete required system upgrades. Currently, the new sampling, testing, reporting and re-sampling requirements, and the removal of 13 pesticides came into effect January 1, 2016. As well, testing requirements for HAAs and updates to standards for Carbon Tetrachloride, Benzene, Vinyl Chloride, Chlorate, Chlorite, and MCPA came into effect January 2017. Refer to **Table 12** for the new Regulatory Requirements. Subsequent phase-in dates are:

- January 1, 2018: Updates to standards for Arsenic came into effect / require reporting
- January 1, 2020: New standards for HAAs and HAAs testing optimization rule for smaller systems are in effect / require reporting.

Parameter	Previous Requirement		Amended R	equirement
	MAC	½ <b>MAC</b>	MAC	1⁄2 MAC
Arsenic	25 µg/L	12.5 µg/L	0 µg/L	5 µg/L
Benzene	5 µg/L	2.5 μg/L	1 µg/L	0.5 μg/L
Carbon Tetrachloride	5 µg/L	2.5 µg/L	2 µg/L	1 µg/L
Vinyl Chloride	2 µg/L	1 µg/L	1 µg/L	0.5 µg/L

#### Table 12 - Regulatory Requirements



# Annual Report

# Century Heights Drinking Water System 2020 Operation and Maintenance Annual Report

7.1.2 b)

# PREPARED BY

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# ΤΟ

Township of Ashfield-Colborne-Wawanosh, 82133 Council Line, R.R.#5, Goderich, ON N7A 3Y2



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# **1.0 INTRODUCTION AND BACKGROUND**

The purpose of the 2020 Annual Report is to document the operation and maintenance data for the Century Heights Drinking Water System for review by the Ministry of Environment, Conservation and Parks (MECP) in accordance with O. Reg. 170/03. This report covers January 1, 2020 to December 31, 2020. A copy of this report will be submitted to the owner to be uploaded to the township's website and can be supplied to interested parties upon request.

# 2.0 DESCRIPTION OF WATER SYSTEM

The Century Heights Drinking Water System (DWS **#220008499**), is classified as a small municipal residential system. Studies to establish the security of these wells from surrounding water proved inconclusive in 2007 and they are now considered to be GUDI (Ground Under the Direct Influence of surface water) sources. The system consists of two wells with a rated capacity of (#1 at 4.2 L/s and #2 at 4.3 L/s) 734 m3/day, with ultra violet and sodium hypochlorite disinfection treatment.

The entire system is located on Concession 1, Lot 1, Western Division, of Ashfield-Colborne-Wawanosh Township. The distribution system serves the community of Century Heights, Maitland View Subdivision, and parts of the Community of Saltford, with a population approximately 250 residents, with approximately 85 customer services.

The system consists of a Class 1 Distribution and Supply, and Class 1 Treatment which is owned by the Township of Ashfield-Colborne-Wawanosh and operated by Veolia Water Canada, the Operating Authority.

Well # 1 is a 150 mm drilled well 66 metres deep, equipped with a submersible pump with a rated capacity of 4.2 Litres /second, with instrumentation and control equipment, and 50 mm discharge line connected to the pump house. Well # 2 is a 150 mm drilled well 66 metres deep equipped with a submersible pump with a rated capacity of 4.3 Litres /second, with instrumentation and control equipment and 100 mm discharge line connected to the pump house. Well # 1 was constructed in 1979, located within the well house and # 2 was constructed in 2005, approximately 10 meters north of the well house.

The well house is equipped with well pumps, back-up diesel generator, chlorinators, a chlorine contact main, cartridge filter trains, UV disinfection system, hydropneumatic pressure vessels, on-line monitoring and alarm generation. The system is controlled by an onsite control.

The well house and its equipment have a daily maximum capacity to deliver 734 cubic metres of potable water per day to the Century Heights community. The current water sources are two deep bedrock wells. Both wells are located on the well house site with dedicated raw water mains feeding the well house.

The water from each well is pumped to a common chlorine contact pipeline (120 m long by 150 mm diameter plus an additional 13 m long by 600 mm diameter water main for additional chlorine contact time) to provide adequate chlorine contact time at maximum flow and before the first consumer, complete with a sampling / service water connection feed back to the pump house.

The well house and equipment are monitored and controlled by an alarm dialer and data recorder.

The attached distribution system is constructed with a combination of polyethylene and PVC piping with polyethylene services. There is no elevated storage to maintain pressure and the system pressure is maintained using pressure tanks and the well pumps.

The system has 3 fire hydrants but lacks the capacity to provide fire flows.

Primary Disinfection is achieved with a UV Disinfection System consisting of two (2) disinfection reactors, one duty and one standby, rated at 40 mJ/cm2 throughout the lamp life time, complete with UV intensity monitor.

Disinfection is also achieved on the Century Heights well supply through chemical treatment with the use of 12% sodium hypochlorite. In the well house this chemical is added prior to the water entering the chlorine contact reservoir at dosages high enough to achieve both primary and secondary disinfection objectives. The system consists of two (2) sodium hypochlorite feed pumps (duty and standby) rated at 0.8 L/hr complete with auto switchover controls, piping, valves and associated monitoring equipment and 13 meters of 600 mm diameter water main as a contact reservoir.

The chlorine dosages range varies with the chlorine demand of the raw water. The free chlorine residual is monitored at the point of entry to the distribution system, by an on-line chlorine analyzer, with a target residual of > 1.00 mg/l and < 1.30 mg/l.

Additional treatment consists of a filtration system consisting of 2 streams of 2 cartridge filter trains one duty and one standby for the removal of particles 5 micron and larger, rated at 8.5 L/s.

The limiting factor regarding flow is chlorine contact time in the chlorine contact main. In order to meet the regulatory CT requirements (CT value > 3.0) increased flows beyond 8.5 litres per second must have an adequate free chlorine residual to counter the decreased retention time in the chlorine contact main. BM Ross and Associates have updated this calculation to meet MECP standards

The treated water is monitored by an on-line chlorine analyzer.

Distribution piping typically ranges in size from 50 mm to 100 mm, and consists of a combination of polyethylene and PVC piping, with polyethylene service connections.

Typical system pressure ranges from 40 P.S.I to 60 P.S.I.

# 3.0 SUMMARY OF WATER QUALITY MONITORING

# 3.1 Water Treatment Equipment Operation and Monitoring

#### 3.1.1 Point of Entry Chlorine Residual

Chlorine residuals are continuously measured using a HACH CL17 online chlorine analyzer, (8760 samples were recorded) and verified for accuracy using a hand-held HACH pocket colorimeter. **Table 1** shows the monthly average of free chlorine residual values on the treated water at the point of entry.

#### 3.1.2 Distribution Chlorine Residual

Chlorine residuals in the distribution system are checked daily using a HACH pocket colorimeter. In 2020, 366 distribution chlorine residuals were recorded.

Table 1. - Treated and Distribution Chlorine Residuals for Century Heights Drinking Water System

Date	Average Treated Chlorine Residual (mg/L)	Average Distribution Chlorine Residual (mg/L)
Jan	1.22	1.02
Feb	1.24	1.00
Mar	1.32	1.10
Apr	1.27	1.07
May	1.26	1.00
Jun	1.15	0.89
Jul	1.19	0.86
Aug	1.21	0.98
Sep	1.26	0.99
Oct	1.21	0.94
Nov	1.20	0.98
Dec	1.29	1.03
Average	1.24	0.99
Min	1.02	0.26
Мах	1.45	1.85
# Samples	366	366

# 3.1.3 Turbidity

The Treated Turbidity and Raw Turbidity is recorded at least once a month using a pocket turbidimeter. **Table 2** provides a summary of raw and treated turbidity results. The maximum turbidity measured in the treated water was 0.26 NTU.

Date	Average Raw Turbidity (NTU)#1	Average Raw Turbidity (NTU)#2	Average Treated Turbidity (NTU)
Jan	0.19	0.17	0.24
Feb	0.20	0.18	0.26
Mar	0.19	0.20	0.26
Apr	0.19	0.19	0.26
May	0.22	0.22	0.26
Jun	0.13	0.14	0.21
Jul	0.13	0.14	0.22
Aug	0.17	0.18	0.22
Sep	0.21	0.18	0.21
Oct	0.21	0.23	0.23
Nov	0.17	0.18	0.24
Dec	0.20	0.18	0.22
Average	0.18	0.18	0.24
Min	0.13	0.14	0.21
Мах	0.22	0.23	0.26
# Samples	52	52	297

Table 2. - Raw and Treated Water Turbidities for Century Heights Drinking Water System

# 3.2 Microbiological Sampling

#### 3.2.1 Raw Water Samples

Raw water samples are taken every week. In 2020, a total of 204 samples were collected at wells 1&2 and analyzed for E. Coli and Total Coliforms. Each E. Coli and Total Coliform result obtained was 0 cfu/100 ml in the raw water. **Table 3 a & b.** provides a summary of bacteriological results performed on the raw water.

Table 3a. - Microbiological Results for Raw Water at Century Heights Drinking Water System for Well #1

		E. Coli		Total	Coliform	
Date	# Samples	# Samples 0	# Samples ≥1	# Samples	# Samples 0	# Samples ≥1
Jan	4	4	0	4	4	0
Feb	4	4	0	4	4	0
Mar	5	5	0	5	5	0
Apr	4	4	0	4	4	0
Мау	4	4	0	4	4	0
Jun	5	5	0	5	5	0
Jul	4	4	0	4	4	0
Aug	4	4	0	4	4	0
Sep	5	5	0	5	5	0
Oct	4	4	0	4	4	0
Nov	4	4	0	4	4	0
Dec	5	5	0	5	5	0
Total	52	52	0	52	52	0

		E. Coli		Total	Coliform	
Date	# Samples	# Samples 0	# Samples ≥1	# Samples	# Samples 0	# Samples ≥1
Jan	4	4	0	4	4	0
Feb	4	4	0	4	4	0
Mar	5	5	0	5	5	0
Apr	4	4	0	4	4	0
Мау	4	4	0	4	4	0
Jun	5	5	0	5	5	0
Jul	4	4	0	4	4	0
Aug	4	4	0	4	4	0
Sep	5	5	0	5	5	0
Oct	4	4	0	4	4	0
Nov	4	4	0	4	4	0
Dec	5	5	0	5	5	0
Total	52	52	0	52	52	0

Table 3b. – Microbiological Results for Raw Water at Century Heights Drinking Water System for Well #2

### 3.2.2 Treated Water (Point of Entry) Samples

One treated water sample from the point of entry is taken every week and analyzed for E.Coli, Total Coliforms and for Heterotrophic Plate Count (HPC). A total of 52 treated water samples were collected and analyzed for E. Coli and Total Coliforms. 52 samples were collected and analyzed for HPCs. All samples were found to be safe. Each E. Coli and Total Coliform result from the treated water was 0 cfu/100 ml. The range of HPC results were 0 - <10 cfu/100 ml.

Table 4 provides a summary of all bacteriological results performed on treated water.

#### **Total Coliform** HPC E. Coli Date # # # # # # # Sample Sample Samples Sample Sample Samples Samples Safe Deteriorating s s 0 ≥1 S s 0 ≥1 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Total

# Table 4. – Microbiological Results for Point of Entry at Century Heights Drinking Water System

#### 3.2.3 Distribution System

Distribution samples are collected every week and tested for E.Coli, Total Coliform and for Heterotrophic Plate Count (HPC). In 2020, a total of 52 distribution samples were collected and analyzed for E. Coli and Total Coliforms. 52 samples were collected and analyzed for HPCs. All E. Coli and total coliform result from the treated water were 0 cfu/100 ml. The range of HPC results were 0 - <10 cfu/100 ml.

Table 5 provides a summary of all bacteriological samples taken in the distribution system.

# Table 5. - Microbiological Results for Century Heights Distribution System

		E. Coli		Tota	al Coliform			н	PC
Date	# Samples	# Samples 0	# Samples ≥1	# Samp les	# Samples 0	# Samples ≥1	# Samples	Safe	Deteriorating
Jan	4	4	0	4	4	0	4	4	0
Feb	4	4	0	4	4	0	4	4	0
Mar	5	5	0	5	5	0	5	5	0
Apr	4	4	0	4	4	0	4	4	0
Мау	4	4	0	4	4	0	4	4	0
Jun	5	5	0	5	5	0	5	5	0
Jul	4	4	0	4	4	0	4	4	0
Aug	4	4	0	4	4	0	4	4	0
Sep	5	5	0	5	5	0	5	5	0
Oct	4	4	0	4	4	0	4	4	0
Nov	4	4	0	4	4	0	4	4	0
Dec	5	5	0	5	5	0	5	5	0
Total	52	52	0	52	52	0	52	52	0

#### 3.3 Chemical Sampling & Testing

#### 3.3.1 Inorganics

One treated water sample is taken every 60 months and tested for inorganics. The most recent samples for the Century Heights Drinking Water System were collected on December 15, 2020 and submitted to the laboratory for analysis of inorganics as listed in Schedule 23. All parameters were found to be within compliance. Inorganics will be sampled and analyzed again on or before December 15, 2025.

Results from 2020 can be found in Table 6.

Table 6. - Schedule 23 Results for Century Heights Drinking Water System

Parameter	Result (µg/L)	Maximum Allowable Concentration (µg/L)
Antimony	<0.9	6
Arsenic	4.3	10
Barium	58.1	1000
Boron	99	5000
Cadmium	0.007	5
Chromium	060	50
Mercury	<0.01	1
Selenium	0.06	10
Uranium	1.38	20

**NOTE:** New regulation standards for Arsenic changed in January 2018, the previous standard of 25µg/L changed to 10µg/L. Consideration and discussion of this parameter should be investigated as soon as possible.

#### 3.3.2 Lead

Schedule 15.1 of Ontario Regulation 170/03 requires that samples be taken during two seasons: once between December 15 and April 15 and once between June 15 and October 15. The Maximum Allowable Concentration for Lead is 10 mg/L. In the two previous lead sampling seasons, pH, lead and alkalinity samples were taken on January 22, 2020 and again on August 19, 2020. The next Lead sample is due in the winter of 2021.

2020 results can be found in **Table 7.** 

	Lead (mg/L)	рН	Alkalinity (mg/L)
Dec-Apr	0.15	7.88	203
Jun-Oct	0.52	8.09	206

 Table 7. – Lead Sampling Program Results for Century Heights Drinking Water System

# 3.3.3 Organics

One treated water sample is taken every 60 months and tested for Schedule 24 organic parameters. The most recent samples were collected on December 15, 2020. All parameters were found to be within compliance. Organics will be sampled and analyzed again on or before December 15, 2025.

2020 sample results can be found in Table 8.

Carbon Tetrachloride         <0.17	Parameter	Result (µg/L)	Maximum Allowable Concentration (µg/L)
1,2-Dichlorobenzene       <0.41	Benzene	<0.32	1
1,4-Dichlorobenzene         <0.36	Carbon Tetrachloride	<0.17	2
1.1-Dichloroethylene       <0.33	1,2-Dichlorobenzene	<0.41	200
1,2-Dichloroethane         <0.35	1,4-Dichlorobenzene	<0.36	5
Dickloromethane         <0.35         50           Monochlorobenzene         <0.30	1,1-Dichloroethylene	<0.33	14
Monochlorobenzene         <0.30         80           Tetrachloroethylene         <0.35	1,2-Dichloroethane	<0.35	5
Tetrachloroethylene         <0.35         30           Trichloroethylene         <0.44	Dichloromethane	< 0.35	50
Trichloroethylene         <0.44         50           Vinyl Chloride         <0.17	Monochlorobenzene	<0.30	80
Vinyl Chloride         <0.17         1           Diquat         <1	Tetrachloroethylene	<0.35	30
Diquat         <1         70           Paraquat         <1	Trichloroethylene	<0.44	50
Paraquat         <1         10           Glyphosate         <1	Vinyl Chloride	<0.17	1
Glyphosate         <1         280           Polychlorinated Biphenyls         <0.04	Diquat	<1	70
Polychlorinated Biphenyls         <0.04         3           2,4-dichloropheno         <0.15	Paraquat	<1	10
2,4-dichlorophenol       <0.15	Glyphosate	<1	280
2,4,6-trichlorophenol       <0.25	Polychlorinated Biphenyls	< 0.04	3
Alachlor       <0.02	2,4-dichloropheno	<0.15	90
Atrazine+N-dealkylated metabolites       <0.01       5         Atrazine       <0.01	2,4,6-trichlorophenol	<0.25	5
Atrazine         <0.01         5           Azinphos-methyl         <0.05	Alachlor	<0.02	5
Azinphos-methyl         <0.05         20           Benzo(a)pyrene         <0.004	Atrazine+N-dealkylated metabolites	<0.01	5
Benzo(a)pyrene         <0.004         0.01           Carbaryl         <0.05	Atrazine	<0.01	5
Carbaryl       <0.05	Azinphos-methyl	<0.05	20
Carbofuran         <0.01         90           Chlorpyrifos         <0.02	Benzo(a)pyrene	< 0.004	0.01
Chlorpyrifos         <0.02         90           Desethyl altrazine         <0.01	Carbaryl	<0.05	90
No.         Constraint         Constraint <td>Carbofuran</td> <td>&lt;0.01</td> <td>90</td>	Carbofuran	<0.01	90
Diazinon         <0.02         20           Dimethoate         <0.06	Chlorpyrifos	<0.02	90
Dimethoate         <0.06         20           Diuron         <0.03	Desethyl altrazine	<0.01	
Diuron         <0.03         150           Malathion         <0.02	Diazinon	<0.02	20
Malathion         <0.02         190           Metolachlor         <0.01	Dimethoate	<0.06	20
Metolachlor         <0.01         50           Metribuzin         <0.02	Diuron	<0.03	150
Metribuzin         <0.02         80           Phorate         <0.01	Malathion	<0.02	190
Phorate <0.01 2	Metolachlor	<0.01	50
	Metribuzin	<0.02	80
Prometryne <0.03 1	Phorate	<0.01	2
	Prometryne	<0.03	1

Table 8. – Schedule 24 Results for Century Heights Drinking Water System

# Annual Report For the 2020 Operating Year

Simazine	<0.01	10
Terbufos	<0.01	1
Triallate	<0.01	230
Trifluralin	<0.02	45
2,4-dichlorophenoxyacetic acid	<0.19	100
Dicamba	<0.20	120
Diclofop-methyl	<0.40	9
MCPA	<0.00012	0.1
Picloram	<1	190

#### 3.3.4 Trihalomethanes and Haloacetic Acids

One distribution sample is taken every three months from a point in the distribution system and tested for Trihalomethanes (THMs) and Haloacetic Acids (HAAs). In 2020, samples were collected during the months of February, May, August and November. The Ontario Drinking Water Quality Standard (ODWQS) has set a Maximum Allowable Concentration (MAC) of 100  $\mu$ g/L for THMs and it is expressed as a running annual average. The new All MAC for HAAs 80 $\mu$ g/L. In 2019 the average THM was found to be 11.9  $\mu$ g/L, which is within compliance, Century Heights has qualified for THM relief in 2020.

Refer to **Table 9.** for the summary of haloacetic acid results.

#### 3.3.5 Nitrate & Nitrite

One treated water sample is taken every three months and tested for nitrate and nitrite. In 2020, samples were collected during the months of February, May, August and November. The Ontario Drinking Water Quality Standard (ODWQS) have set a Maximum Allowable Concentration (MAC) of 1 mg/L for nitrites and 10 mg/L for nitrates. The results were found to be within compliance.

Refer to Table 9.

	Nit	rate	Ni	trite		I <b>M</b> s 119	HA	As
Date	# Samples	Result (mg/L)	# Samples	Result (mg/L)	# Samples	Result (µg/L)	# Samples	Result (µg/L)
Feb	1	<0.006	1	<0.003	1	6	1	<5.3
Мау	1	<0.006	1	<0.003	1	18	1	<5.3
Aug	1	<0.006	1	<0.003	1	14	1	<5.3
Nov	1	0.008	1	<0.003	1	9.4	1	<5.3
Total	4		4		4		4	
Average		0.006		<0.003		11.9		<5.3
Maximum		0.008		<0.003		18		<5.3

## Table 9. – Nitrate, Nitrite, THM and HAA Results at Century Heights Drinking Water System

#### 3.3.6 Sodium

One water sample is collected every 60 months and tested for Sodium. O. Reg 170/03 has set a Maximum Acceptable concentration (MAC) of 20 mg/L for Sodium which requires the Medical Office of Health be notified if the concentration exceeds the MAC. These samples were last collected on June 21, 2016 and June 30, 2016 and were found to be 23.0 mg/L and 21.9 mg/L respectively, which is over the MAC and requires notice to the Health Unit. The Huron County Health Unit has prepared a notice regarding high sodium levels in drinking water. More information can be found at <a href="http://www.acwtownship.ca/wordpress/wp-content/uploads/2013/09/Century-Heights.pdf">http://www.acwtownship.ca/wordpress/wp-content/uploads/2013/09/Century-Heights.pdf</a>. The next water sample for Sodium will be collected and analyzed on or before June 12, 2021.

## 3.3.7 Fluoride

One water sample is collected at least once every 60 months and tested for Fluoride. The Ontario Drinking Water Quality Standards (ODWQS) have set a MAC of 1.5 mg/L. On August 22, 2017 and August 25, 2017 a sample was collected for this analysis. The first sample was found to have a concentration of 2.22 mg/L, which is greater than the MAC. The second sample again came back higher than the MAC at 2.20 mg/L. This is due to high levels of naturally occurring fluoride in the aquifer. For more information see:

<u>http://www.acwtownship.ca/wordpress/wp-content/uploads/2013/09/CenturyHeights.pdf.</u> The next water sample for Fluoride will be collected and analyzed on or before November 14, 2022.

## 4.0 WATER AND CHEMICAL USAGE

## 4.1 Chemical Usage

From January 1, 2020 to December 31, 2020, **158.98** kg of sodium hypochlorite was used to ensure proper disinfection in the distribution system with an average dosage of **3.93** mg/L. (43.70 kg higher than 2019, resulting from higher flows in 2020) Refer to **Table 10**.

	Sodium Hypochlorite						
Date	Usage (kg)	Average Dosage (mg/L)					
Jan	7.87	3.86					
Feb	6.97	3.72					
Mar	8.83	4.01					
Apr	8.69	3.65					
Мау	13.39	3.65					
Jun	20.84	3.81					
Jul	29.12	3.88					
Aug	18.56	3.77					
Sep	18.01	3.60					
Oct	10.42	3.88					
Nov	7.31	3.74					
Dec	8.97	4.19					
Total	158.98						
Average		3.93					

Table 10. – Chemical Usage at Century Heights Drinking Water System

#### 4.2 Annual Flows

A summary of the water supplied to the distribution system in 2020 is provided in **Table 11.** This Table provides a breakdown of the monthly flow provided to the distribution system. The system had 12,986 m<sup>3</sup> higher flow than in 2019.

Flow meters were calibrated on September 11, 2020 by Indus Control and were found to be acceptable.

Date	Average Daily Flow (m³)	Maximum Daily Flow (m <sup>3</sup> )	Total Monthly Flow (m <sup>3</sup> )
Jan	67	96	2074
Feb	66	82	1871
Mar	72	110	2201
Apr	80	112	2379
May	119	237	3668
Jun	183	283	5464
Jul	243	364	7511
Aug	160	252	4920
Sep	159	206	4759
Oct	88	195	2736
Nov	66	87	1965
Dec	70	90	2183
Average	115		
Мах		364	
Total			42000

Table 11. - Treated Water Flows for Century Heights Drinking Water System

## 5.0 IMPROVEMENTS TO SYSTEM AND ROUTINE AND PREVENTATIVE MAINTENANCE

The following summarizes water system improvements and routine and preventative maintenance for the Century Heights Drinking Water System:

- Maintenance Work Orders carried out monthly
- The system was flushed during the months of September and October.
- The HACH 1720E on-line Turbidimeter was replaced with a used GLI unit.
- New Chlorine pumps were installed in April

# 6.0 MINISTRY OF THE ENVIRONMENT INSPECTIONS AND REGULATORY ISSUES

The Century Heights Drinking Water System was inspected by The Ministry of Environment, Conservation and Parks on March 22, 2020. The inspection was completed by Matt Shannon and received 100%

There were no instances of adverse water quality.

# 7.0 MOECC Regulatory Changes

It should be noted that there will be some upcoming changes to Ontario Regulation 170/03 and Ontario Regulation 169/03 that strengthen standards and clarify testing requirements as follows:

- Strengthen standards for Arsenic, Carbon Tetrachloride, Benzene, and Vinyl Chloride;
- Adopt new standards for Chlorate, Chlorite, 1-Methyl-4-Chlorophenoxyacetic acid (MCPA) and Haloacetic Acids (HAAs); (NOTE: Chlorate and Chlorite testing is only required for Municipal Drinking Water Systems using Chlorine Dioxide treatment equipment.)
- Clarify/optimize testing, sampling and reporting requirements for Trihalomethanes (THMs) and HAAs; and
- Remove 13 pesticides from testing requirements.

The aforementioned amendments will be phased in over the next four years to allow system owners and/or operators the opportunity to collect baseline information and complete required system upgrades. Currently, the new sampling, testing, reporting and re-sampling requirements, and the removal of 13 pesticides came into effect January 1, 2016. As well, testing requirements for HAAs and updates to standards for Carbon Tetrachloride, Benzene, Vinyl Chloride, Chlorate, Chlorite, and MCPA came into effect January 2017.

Refer to **Table 12** for the new Regulatory Requirements. Subsequent phase-in dates are:

- January 1, 2018: Updates to standards for Arsenic came into effect / require reporting
- January 1, 2020: New standards for HAAs and HAAs testing optimization rule for smaller systems will come into effect / require reporting.

Parameter	Previous Requirement		Amended F	Requirement
	MAC	MAC ½ MAC		1⁄2 MAC
Arsenic	25 µg/L	12.5 µg/L	10 µg/L	5 µg/L
Benzene	5 µg/L	2.5 µg/L	1 µg/L	0.5 µg/L
Carbon Tetrachloride	5 µg/L	2.5 μg/L	2 µg/L	1 µg/L
Vinyl Chloride	2 µg/L	1 µg/L	1 µg/L	0.5 µg/L

Table 12 - Regulatory Requirements



# Annual Report

# Dungannon Drinking Water System 2020 Operation and Maintenance Annual Report

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PREPARED BY

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# ΤΟ

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# **1.0 INTRODUCTION AND BACKGROUND**

The purpose of the 2020 Annual Report is to document the operation and maintenance data for the Dungannon Drinking Water System for review by the Ministry of the Environment, Conservation and Parks (MECP) in accordance with O. Reg. 170/03. This report covers January 1, 2020 to December 31, 2020. A copy of this report will be submitted to the owner to be uploaded to the township's website and can be supplied to interested parties upon request.

# 2.0 DESCRIPTION OF WATER SYSTEM

The Dungannon Drinking Water System (DWS **#260007842**), consists of one drilled well, Well **#** 2-02 was constructed December 2002 in accordance with construction standards as identified in the Ontario Regulation 903/03 made under the Ontario Water Resources Act. Well **#** 2 is a 203 mm diameter 87 m deep drilled groundwater well (Water well record number 3007430) located south of the Well House.

Well # 1 was removed from service to the drinking water system on April 3, 2017.

Well # 2 water quality monitoring results confirm this well meets the Ontario Drinking Water Quality Standards. (O Reg 169/03). Only Well # 2 provides water supply to the system. Arsenic regulation change from  $25\mu g/L$  to  $10\mu g/L$  on January 1, 2018 has caused Well #2 to be at or below the limit. The MECP is aware of this.

The Dungannon Well Supply is designated as a Large Municipal Residential drinking-water system that obtains water from a raw water source that is groundwater. The treatment and distribution system was commissioned in 2003 and provides potable water to an estimated population of 250 residents in the village of Dungannon.

The treatment process consists of a sodium hypochlorite disinfection system and an iron sequestering system using sodium silicate.

The rated capacity of the treatment system is 657 m3/day as identified in the facility drinking water licence.

The water treatment equipment is designed to be capable of achieving, at all times, primary disinfection in accordance with the Ministry's Procedure for Disinfection of Drinking Water in Ontario, including at least 99 per cent removal or inactivation of viruses by the time the water enters the distribution system. Secondary disinfection is provided by residual chlorine from the primary disinfection process.

The distribution system does not include any storage facilities and has no fire hydrants. There are 7 blow off valves in the distribution system to accommodate flushing.

# 3.0 SUMMARY OF WATER QUALITY MONITORING

#### 3.1 Water Treatment Equipment Operation and Monitoring

#### 3.1.1 Point of Entry Chlorine Residual

Chlorine residuals are continuously measured using a HACH CL17 online chlorine analyzer, 8760 samples were taken in 2020 and verified for accuracy using hand-held HACH pocket colorimeter. **Table 1** shows the monthly average of free chlorine residual values on the treated water at the point of entry.

## 3.1.2 Distribution Chlorine Residual

Chlorine residuals in the distribution system are checked daily using a HACH pocket colorimeter. In 2020, 366 distribution chlorine residuals were recorded.

**Table 1.** – Treated and Distribution Chlorine Residuals for Dungannon Drinking Water System using the HACH pocket colorimeter.

Date	Average Treated Chlorine Residual (mg/L)	Average Distribution Chlorine Residual (mg/L)
Jan	1.25	1.12
Feb	1.27	1.15
Mar	1.25	1.14
Apr	1.30	1.19
Мау	1.28	1.22
Jun	1.27	1.14
Jul	1.25	0.97
Aug	1.23	1.04
Sep	1.37	1.09
Oct	1.23	1.02
Nov	1.26	1.10
Dec	1.32	1.21
Average	1.28	1.11
Min	1.00	0.38
Мах	1.48	1.44
# Samples	366	366

## 3.1.3 Turbidity

Turbidity is measured using a pocket turbidimeter. **Table 2** provides a summary of raw and treated turbidity results.

Table 2. – Raw and Treated Water Turbidities for Dungannon Drinking Water System

Date	Average Raw Turbidity (NTU)	Average Treated Turbidity (NTU)		
Jan	0.46	0.24		
Feb	0.27	0.24		
Mar	0.26	0.24		
Apr	0.27	0.23		
Мау	0.32	0.23		
Jun	0.21	0.20		
Jul	0.24	0.19		
Aug	0.28	0.18		
Sep	0.43	0.19		
Oct	0.50	0.22		
Nov	0.40	0.19		
Dec	0.33	0.20		
Average	0.33	0.21		
Min	0.21	0.18		
Мах	0.50	0.24		
# Samples	52	242		

## 3.2 Microbiological Sampling

#### 3.2.1 Raw Water Samples

Raw water samples are taken every week. In 2020 a total of 53 samples were collected and analyzed for E. Coli and Total Coliforms. Each E. Coli and Total Coliform results obtained were 0 cfu/100 ml in the raw water.

Table 3 provides a summary of bacteriological results performed on the raw water.

Table 3. - Microbiological Results for Raw Water at Dungannon Drinking Water System

	E	E. Coli		Total	Coliform	
Date	# Samples	# Samples 0	# Samples ≥1	# Samples	# Samples 0	# Samples ≥1
Jan	4	4	0	4	4	0
Feb	4	4	0	4	4	0
Mar	5	5	0	5	5	0
Apr	4	4	0	4	5	0
Мау	4	4	0	4	4	0
Jun	5	5	0	5	4	0
Jul	5	5	0	5	5	0
Aug	4	4	0	4	4	0
Sep	5	5	0	5	5	0
Oct	4	4	0	4	4	0
Nov	4	4	0	4	4	0
Dec	5	5	0	5	5	0
Total	53	53	0	53	53	0

#### 3.2.2 Treated Water (Point of Entry) Samples

One treated water sample from the point of entry is taken every week and analyzed for E.Coli, Total Coliforms and for Heterotrophic Plate Count (HPC). A total of 53 treated water samples were collected and analyzed for the above parameters. Each E. Coli and Total Coliform samples were found to be safe. The range of HPC results were 0 - <10 cfu/100 ml.

Table 4. provides a summary of all bacteriological results performed on treated water.

#### Table 4. - Microbiological Results for Point of Entry at Dungannon Drinking Water System

		E. Coli		Тс	otal Colifor	m		Н	PC
Date	# Samples	# Samples 0	# Samples ≥1	# Samples	# Samples 0	# Samples ≥1	# Samples	Safe	Deteriorating
Jan	4	5	0	5	5	0	5	5	0
Feb	4	4	0	4	4	0	4	4	0
Mar	5	4	0	4	4	0	4	4	0
Apr	4	5	0	5	5	0	5	5	0
Мау	4	4	0	4	4	0	4	4	0
Jun	5	4	0	4	4	0	4	4	0
Jul	5	5	0	5	5	0	5	5	0
Aug	4	4	0	4	4	0	4	4	0
Sep	5	5	0	5	5	0	5	5	0
Oct	4	4	0	4	4	0	4	4	0
Nov	4	4	0	4	4	0	4	4	0
Dec	5	5	0	5	5	0	5	5	0
Total	53	53	0	53	53	0	53	53	0

## 3.2.3 Distribution System

Distribution samples are collected weekly and tested for E.Coli, Total Coliform and for Heterotrophic Plate Count (HPC). In 2020, a total of **108** distribution samples were collected and analyzed for the above parameters. The range of HPC results were 0 - 11 cfu/100 ml. 2 samples of Total Coliform results were higher than 0 cfu/100 ml. Refer to page 19, AWQI #'s 150882 and # 151013.

Table 5 provides a summary of all bacteriological samples taken in the distribution system.

	E. Coli			Total Coliform				HPC		
Date	# Samples	# Samples 0	# Samples ≥1	# Samp les	# Samples 0	# Samples ≥1	# Sample s	Safe	Deterioratin g	
Jan	8	10	0	10	10	0	5	5	0	
Feb	8	8	0	8	8	0	4	4	0	
Mar	10	8	0	8	8	0	4	4	0	
Apr	8	9	0	9	9	0	5	5	0	
Мау	8	8	0	8	8	0	4	4	0	
Jun	10	10	0	10	10	0	5	5	0	
Jul	14	14	0	14	12	2*	11	11	0	
Aug	8	8	0	8	8	0	4	4	0	
Sep	10	10	0	10	10	0	5	5	0	
Oct	8	8	0	8	8	0	4	4	0	
Nov	8	8	0	8	8	0	4	4	0	
Dec	10	10	0	10	10	2	5	5	0	
Total	108	108	0	108	106	2	58	58	0	

Table 5. - Microbiological Results for Dungannon Distribution System

## 3.3 Chemical Sampling & Testing

#### 3.3.1 Inorganics

One treated water sample is taken every 36 months and tested for inorganics. The most recent samples for the Dungannon Drinking Water System were collected on December 16, 2019 and submitted to the laboratory for analysis of inorganics as listed in Schedule 23. All parameters were found to be within compliance. Inorganics will be sampled and analyzed again on or before December 16, 2022.

Results from 2019 can be found in Table 6a.

Results for arsenic testing can be found in Table 6b.

Table 6a Schedule 23 Results for	Dungannon Drinking Water System
----------------------------------	---------------------------------

Parameter	Result (µg/L)	Maximum Allowable Concentration (µg/L)
Antimony	<0.09	6
Barium	159	1000
Boron	64	5000
Cadmium	0.004	5
Chromium	0.11	50
Mercury	<0.01	1
Selenium	<0.04	10
Uranium	1.08	20

Table 6b. – Arsenic Results for Dungannon Drinking Water System

Date	Raw (μg/L)	Treated Water (µg/L)
01-07-20	11	
01-14-20	9	
01-21-20	10.40	
01-28-20	10.50	

Date	Raw (µg/L)	Treated Water (µg/L)
02-04-20	10.80	
02-11-20	10.70	
02-12-20		11.90
02-18-20	10.60	
02-25-20	10.70	
03-03-20	10.30	
03-10-20	10.80	
03-17-20	11.50	
03-24-20	11.50	
03-31-20	11.00	
04-07-20	11.30	
04-14-20	10.40	
04-21-20	10.80	
04-28-20	10.80	
05-05-20	10.60	
05-12-20	11.00	
05-19-20	10.30	
05-22-20		11.90
05-26-20	12.50	
06-02-20	11.30	
09-09-20	12.10	
09-16-20	11.10	
06-23-20	11.30	
06-29-20	12.00	

Date	Raw (µg/L)	Treated Water (µg/L)
07-14-20	12.20	
07-21-20	11.30	
07-28-20	10.00	
08-4-20	11.40	
08-11-20	12.70	
08-14-20		11.90
08-18-20	10.70	
08-25-20	13.70	
09-01-20	15.60	
09-8-20	14.90	
09-15-20	15.20	
09-21-20	15.60	
09-29-20	18.10	
10-6-20	16.40	
10-13-20	11.50	
10-20-20	11.00	
10-27-20	10.20	
11-3-20	10.90	
11-10-20	9.90	10.6
11-17-20	10.80	
11-24-20	11.30	
12-01-20	9.40	
Average	11.60	11.60

### 3.3.2 Lead

Schedule 15.1 of Ontario Regulation 170/03 requires that samples be taken during two seasons: once between December 15 and April 15 and once between June 15 and October 15. The Maximum Allowable Concentration for Lead is 0.01 mg/L. In the two previous lead sampling seasons, pH and alkalinity samples were taken on January 15, 2020 and August 21, 2020. The next lead samples are due in the 2021 schedule.

2020 results for pH and alkalinity can be found in Table 7.

	Lead (mg/L)	рН	Alkalinity (mg/L)
Dec-Apr		7.88	214
Jun-Oct		8.19	210

Table 7. - Lead Sampling Program Results for Dungannon Drinking Water System

## 3.3.3 Organics

One treated water sample is taken every 36 months and tested for schedule 24 organic parameters. The most recent samples were collected on December 16, 2019. All parameters were found to be within compliance. Organics will be sampled and analyzed again on or before December 16, 2022. The 2019 sample results can be found in **Table 8**.

Parameter	Result (µg/L)	Maximum Allowable Concentration (μg/L)
Benzene	<0.32	1
Carbon Tetrachloride	<0.17	2
1,2-Dichlorobenzene	<0.41	200
1,4-Dichlorobenzene	<0.36	5
1,1-Dichloroethylene	<0.33	14
1,2-Dichloroethane	<0.35	5
Dichloromethane	<0.35	50
Monochlorobenzene	<0.3	80
Tetrachloroethylene	<0.35	30
Trichloroethylene	<0.44	50
Vinyl Chloride	<0.17	1
Diquat	<1	70
Paraquat	<1	10
Glyphosate	<1	280
Polychlorinated Biphenyls	<0.04	3
Benzo(a)pyrene	< 0.004	0.01
2,4-dichlorophenol	<0.19	900
2,4,6-trichlorophenol	<0.25	5
2,3,4,6-tetrachlorophenol	<0.20	100
Pentachlorophenol	<0.15	60
Alachlor	<0.02	5
Atrazine+N-dealkylated metabolites	<0.01	5
Atrazine	< 0.01	-
De-ethylated atrazine	<0.01	-
Azinphos-methyl	<0.05	20
Carbaryl	<0.05	90
Carbofuran	< 0.01	90
Chlorpyrifos	<0.02	90
Diazinon	<0.02	20
Dimethoate	<0.06	20
Diuron	<0.03	150
Malathion	<0.02	190
Methoxychlor	<0.01	900
Metolachlor	<0.01	50
Metribuzin	<0.02	80
Phorate	<0.01	2

Table 8. - Schedule 24 Results for Dungannon Drinking Water System

# Annual Report For the 2020 Operating Year

Prometryne	< 0.03	1
Simazine	<0.01	10
Terbufos	<0.01	1
Triallate	<0.01	230
Trifluralin	<0.02	45
2,4-dichlorophenoxyacetic acid	<0.19	100
Bromoxynil	<0.33	5
Dicamba	<0.20	120
Diclofop-methyl	<0.40	9
MCPA	<0.00012	0.00012
Picloram	<1	190

#### 3.3.4 Trihalomethanes and Haloacetic Acids

One distribution sample is taken every three months from a point in the distribution system and tested for Trihalomethanes (THMs) and Haloacetic Acids (HAAs). In 2020 samples were collected during the months of February, May, August and November. The Ontario Drinking Water Quality Standard (ODWQS) has set a Maximum Allowable Concentration (MAC) of 100 µg/L for THMs and it is expressed as a running annual average(RAA). Currently there is no MAC for HAAs. In 2020, the average THM was found to be 11.45 µg/L, which is within compliance.

Refer to Table 9 for the summary of trihalomethane and haloacetic acid results.

## 3.3.5 Nitrate & Nitrite

One treated water sample is taken every three months and tested for nitrate and nitrite. In 2020, samples were collected during the months of February, May and August and November. The Ontario Drinking Water Quality Standard (ODWQS) have set a Maximum Allowable Concentration (MAC) of 1 mg/L for nitrites and 10 mg/L for nitrates. The results were found to be within compliance.

Refer to Table 9.

	Nit	rate	Ni	trite	TH	Ms	HA	As
Date	# Samples	Result (mg/L)	# Samples	Result (mg/L)	# Samples	Result (µg/L)	# Samples	Result (µg/L)
Feb	1	<0.006	1	<0.003	1	6.8	1	<5.3
Мау	1	<0.006	1	< 0.003	1	9	1	<5.3
Aug	1	<0.006	1	< 0.003	1	18	1	<5.3
Nov	1	<0.006	1	< 0.003	1	12	1	<5.3
Total	4		4		4		4	
Average		<0.006		< 0.003		11.45		<5.3
Maximum		<0.006		< 0.003		18		<5.3

#### Table 9. – Nitrate, Nitrite, THM and HAA Results at Dungannon Drinking Water System

#### 3.3.6 Sodium

One treated water sample is collected every 60 months and tested for Sodium. O. Reg 170/03 has set a Maximum Acceptable concentration (MAC) of 20 mg/L for Sodium which requires the Medical Office of Health be notified if the concentration exceeds the MAC. These samples were last collected on June 21, 2016 and were found to be 18.2 mg/L, which is within compliance. The next water sample for Sodium will be collected and analyzed on or before June 21, 2021.

## 3.3.7 Fluoride

One treated water sample is collected at least once in every 60 months and tested for Fluoride. The Ontario Drinking Water Quality Standards (ODWQS) have set a MAC of 1.5 mg/L. On November 6, 2018 a sample was collected for this analysis. The first sample was found to have a concentration of 1.5 mg/L, which is greater than the MAC. This is due to high levels of naturally occurring fluoride in the aguifer. The second sample came back under the MAC at 1.45 mg/L. The next water sample for Fluoride will be collected and analyzed on or before November 6, 2023. For more information see:

http://www.acwtownship.ca/wordpress/wp-content/uploads/2013/09/DungannonWaterQualityInformation.pdf.

## 4.0 WATER AND CHEMICAL USAGE

#### 4.1 Chemical Usage

Refer to **Table 10.** From January 1, 2020 to December 31, 2020, 92.62 kg of sodium hypochlorite was used to ensure proper disinfection in the distribution system with an average dosage of 3.51 mg/L. 81.43 kg of sodium silicate was used in 2020 to reduce the concentration of dissolved iron the an average dosage of 3.24 kg.

Date	Sodium I	Hypochlorite	Sodium Silicate	
	Usage (kg)	Average Dosage (mg/L)	Usage (kg)	Average Dosage (mg/L)
Jan	5.11	3.38	5.00	3.36
Feb	5.43	3.38	5.92	3.77
Mar	5.72	3.36	6.58	3.87
Apr	5.72	3.49	5.39	3.27
Мау	7.19	3.47	7.76	4.08
Jun	8.52	3.83	6.58	3.03
Jul	8.62	3.53	7.50	3.12
Aug	9.07	3.82	7.10	3.02
Sep	14.47	3.62	10.39	2.63
Oct	8.33	3.25	7.10	2.91
Nov	6.83	3.51	5.66	2.92
Dec	7.61	3.48	6.45	2.95
Total	92.62		81.43	
Average		3.51		3.24

Table 10. – Chemical Usage at Dungannon Drinking Wa	Vater System
-----------------------------------------------------	--------------

#### 4.2 Annual Flows

A summary of the water supplied to the distribution system in 2020 is provided in **Table 11.** This Table provides a breakdown of the monthly flow provided to the distribution system.

Flow meters were calibrated on September 11, 2020 by Indus Control and were found to be acceptable.

Date	Average Daily Flow (m³)	Maximum Daily Flow (m³)	Total Monthly Flow (m³)
Jan	48.68	67	1509
Feb	55.45	86	1608
Mar	55.00	85	1705
Apr	54.73	70	1642
Мау	66.16	119	2051
Jun	74.03	111	2221
Jul	79.65	165	2469
Aug	79.29	139	2458
Sep	133.47	167	4004
Oct	82.74	199	2565
Nov	64.83	87	1945
Dec	70.48	88	2185
Average	72.04		
Мах		199	
Total			26362

Table 11. – Treated Water Flows for Dungannon Drinking Water System

# 5.0 IMPROVEMENTS TO SYSTEM AND ROUTINE AND PREVENTATIVE MAINTENANCE

The following summarizes water system improvements and routine and preventative maintenance for the Dungannon Drinking Water System:

- Testing of raw water was being completed weekly for arsenic.
- Approval to stop Raw water Arsenic testing received from the HPPH on Dec 2, 2020
- The Arsenic Pilot Project was completed in June .
- July Well #1 offline removed from service on April 3, 2017.
- 2 Pressure tanks were replaced
- Flushing of the system occurred in October.
- MDWL was renewed and expires December 18, 2024.

## 6.0 MINISTRY OF THE ENVIRONMENT INSPECTIONS AND REGULATORY ISSUES

This section provides a summary of all non-compliance with regulatory requirements identified during the inspection period, as well as actions required to address these issues.

The Dungannon Drinking Water System was inspected in 2020 by The Ministry of Environment, Conservation and Parks. The inspection was completed by Matt Shannon on September 3, 2020.

The Inspection rating achieved was 95.83% for this report.

There was 1 non compliance:

In June 2020, a UPS failure caused data loss for a brief period. Once an operator was on-site, primary disinfection (chlorine residual) measurements were performed by a handheld device until repairs were made to the UPS. The incident was documented in the logbook and reported to the MECP water inspector. No further actions were required

There was 2 instance of adverse water quality in 2020:

- 1. AWQI #150882- on July 23, 2020, there was 125 TC at the Joseph St. sample station, resamples were all clear of micro bacteriologicals.
- 2. AWQI #151013 on July 30, 2020 there was a NDOG (Non determined overgrowth) TC at the Joseph St, sample station, resamples were all clear of micro bacteriologicals.

## 7.0 MECP Regulatory Changes

It should be noted that there will be some upcoming changes to Ontario Regulation 170/03 and Ontario Regulation 169/03 that strengthen standards and clarify testing requirements as follows:

- Strengthen standards for Arsenic, Carbon Tetrachloride, Benzene, and Vinyl Chloride;
- Adopt new standards for Chlorate, Chlorite, 1-Methyl-4-Chlorophenoxyacetic acid (MCPA) and Haloacetic Acids (HAAs); (NOTE: Chlorate and Chlorite testing is only required for Municipal Drinking Water Systems using Chlorine Dioxide treatment equipment.)
- Clarify/optimize testing, sampling and reporting requirements for Trihalomethanes (THMs) and HAAs; and
- Remove 13 pesticides from testing requirements.

The aforementioned amendments will be phased in over the next four years to allow system owners and/or operators the opportunity to collect baseline information and complete required system upgrades. Currently, the new sampling, testing, reporting and re-sampling requirements, and the removal of 13 pesticides came into effect January 1, 2016. As well, testing requirements for HAAs and updates to standards for Carbon Tetrachloride, Benzene, Vinyl Chloride, Chlorate, Chlorite, and MCPA came into effect January 2017.

Refer to Table 12 for the new Regulatory Requirements.

Subsequent phase-in dates are:

- January 1, 2018: Updates to standards for Arsenic came into effect / require reporting
- January 1, 2020: New standards for HAAs and HAAs testing optimization rule for smaller systems are in effect / require reporting.

Parameter	Previous Requirement MAC ½ MAC		Amended R MAC	equirement ½ MAC
Arsenic	25 µg/L	12.5 µg/L	10 µg/L	5 µg/L
Benzene	5 µg/L	2.5 μg/L	1 µg/L	0.5 µg/L
Carbon Tetrachloride	5 µg/L	2.5 μg/L	2 µg/L	1 µg/L
Vinyl Chloride	2 µg/L	1 µg/L	1 µg/L	0.5 µg/L

Table 12 - Regulatory Requirements



# Huron Sands Drinking Water System 2020 Operation and Maintenance **Annual Report**

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# PREPARED BY

**Veolia Water** 100 Cove Rd. Goderich, ON N7A 3Z2

## TO

Township of Ashfield-Colborne-Wawanosh, 82133 Council Line, R.R.#5, Goderich, ON N7A 3Y2



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## **1.0 INTRODUCTION AND BACKGROUND**

The purpose of the 2020 Annual Report is to document the operation and maintenance data for the Huron Sands Drinking Water System for review by The Ministry Environment, Conservation and Parks(MECP) in accordance with O. Reg. 170/03. This report covers January 1, 2020 to December 31, 2020. A copy of this report will be submitted to the owner to be uploaded to the township's website and can be supplied to interested parties upon request.

## 2.0 DESCRIPTION OF WATER SYSTEM

The Huron Sands Drinking Water System (DWS **#220007757**), is characterized as a "secure ground water" system and is classified as a small municipal residential system. It is owned by the Township of ACW and operated by Veolia Water

Canada, the Operating Authority. The system consists of one well with chlorination treatment and iron sequestering, and is operated seasonally between April and November.

The entire system is located on Front Concession, Lot 19, in the Huron Sands Subdivision of Ashfield-Colborne-Wawanosh Township. The Huron Sands well house is located at 85019 Michelle St. S, Huron Sands Subdivision, Ashfield-Colborne-Wawanosh. The distribution system serves the community of Huron Sands with a population of approximately 100 residents, with approximately 48 customer services.

Well # 1, drilled in 2001, is a secure deep bedrock well, 200 mm, 100 metres deep, equipped with a submersible pump with a rated capacity of 3.8 L/s, with instrumentation and control equipment, and 50 mm discharge line connected to the pump house. The well house and its equipment have a daily capacity to deliver 328 m<sup>3</sup> of potable water per day to the Huron Sands community.

The well house is equipped with a flow control valve, a chlorine pump, a chemical feed pump for iron sequestering, a chlorine contact watermain, on-line chlorine monitoring, alarm generation, data recorder and auto-dialer. A double throw manually operated transfer switch is available allowing the use of a portable gen set during extended power outages.

The water from the well is pumped to a chlorine contact main (900 mm x 6.1 metres long DR41 PVC) to provide adequate chlorine contact time at maximum flow and before the first consumer, complete with a sampling / service water connection feed back to the pump house. The distribution system is constructed with a combination of PVC piping with polyethylene services.

There is no elevated storage to maintain pressure and the system pressure is maintained using pressure tanks and the well pump.

The system has no fire hydrants and lacks the capacity to provide fire flows.

Disinfection is achieved on the Huron Sands well supply through the use of 6% sodium hypochlorite. In the well house, this chemical is added prior to the water entering the chlorine contact main at dosages high enough to achieve both primary and secondary disinfection objectives.

The chlorine dosages range varies with the chlorine demand of the raw water. The free chlorine residual is monitored at the point of entry to the distribution system, by an on-line chlorine analyzer, with a target residual of > 1.00 mg/L and < 1.30 mg/L.

The limiting factor regarding flow is chlorine contact time in the chlorine contact main. In order to meet the regulatory CT requirements (CT value > 3.0), increased flows beyond 3.8 L/s must have an adequate free chlorine residual to counter the decreased retention time in the chlorine contact watermain.

The treated water is monitored by an on-line chlorine analyzer.

Distribution piping typically ranges in size from 50 mm to 100 mm, and consists of PVC piping, with polyethylene service connections.

A 100 mm diameter discharge water main outside the pump house supplies treated water to the Huron Sands Estates Subdivision.

Typical system pressure ranges from 40 P.S.I to 60 P.S.I.

# 3.0 SUMMARY OF WATER QUALITY MONITORING

## 3.1 Water Treatment Equipment Operation and Monitoring

#### 3.1.1 Point of Entry Chlorine Residual

Chlorine residuals are continuously measured using a HACH CL17 online chlorine analyzer (5110 samples were recorded over a 7 month period) and verified for accuracy using a hand-held HACH pocket colorimeter.

Table 1 shows the monthly average of free chlorine residual values on the treated water at the point of entry.

## 3.1.2 Distribution Chlorine Residual

Chlorine residuals in the distribution system are checked using a HACH pocket colorimeter. In 2020, 60 distribution chlorine residuals were recorded.

Date	Average Treated Chlorine Residual (mg/L)	Average Distribution Chlorine Residual (mg/L)		
Jan	-	-		
Feb	-	-		
Mar	-	-		
Apr	1.75	1.42		
May	1.48	1.34		
Jun	1.43	1.33		
Jul	1.49	1.35		
Aug	1.52	1.42		
Sep	1.43	1.28		
Oct	1.61	1.21		
Nov	1.48	1.34		
Dec	-	-		
Average	1.52	1.34		
Min	1.09	0.68		
Max	1.96	1.82		
# Samples	68	60		

Table 1. - Treated and Distribution Chlorine Residuals for Huron Sands Drinking Water System

## 3.1.3 Turbidity

Turbidity is measured using a pocket turbidimeter.

 Table 2 provides a summary of raw and treated turbidity results.

	c	
Table 2. – Raw and Treated Water	I urbidities for Huron	Sands Drinking Water System

Date	Average Raw Turbidity (NTU)	Average Treated Turbidity (NTU)
Jan	-	-
Feb	-	-
Mar	-	-
Apr	0.63	0.36
May	0.76	0.30
Jun	0.34	0.25
Jul	0.28	0.23
Aug	0.30	0.22
Sep	0.33	0.20
Oct	0.35	0.25
Nov	0.34	0.21
Dec	-	-
Average	0.39	0.26
Min	0.26	0.12
Мах	0.76	0.62
# Samples	12	63

## 3.2 Microbiological Sampling

#### 3.2.1 Raw Water Samples

Raw water samples are taken every two weeks. In 2020, a total of 17 samples were collected and analyzed for E. Coli and Total Coliforms. Each E. Coli and Total Coliform result obtained was 0 cfu/100 ml in the raw water.

Table 3 provides a summary of bacteriological results performed on the raw water.

Table 3. - Microbiological Results for Raw Water at Huron Sands Drinking Water System

		E. Coli		Total Coliform			
Date	# Samples	# Samples 0	# Samples ≥1	# # # Samples Samples Samples 0 ≥1			
Jan	-	-	-				
Feb	-	-	-				
Mar	-	-	-				
Apr	2	2	0	2 2 0			
Мау	2	2	0	2 2 0			
Jun	3	3	0	3 3 0			
Jul	2	2	0	2 2 0			
Aug	2	2	0	2 2 0			
Sep	2	2	0	2 2 0			
Oct	3	3	0	3 3 0			
Nov	1	1	0	1 1 0			
Dec	-	-	-				
Total	17	17	0	17 17 0			

#### 3.2.2 Treated Water (Point of Entry) Samples

One treated water sample from the point of entry is taken every two weeks and analyzed for E.Coli, Total Coliforms and for Heterotrophic Plate Count (HPC). In 2020, a total of 17 treated water samples were collected and analyzed for the above parameters. All samples were found to be safe. Each E. Coli and Total Coliform results from the treated water was 0 cfu/100 ml. The range of HPC results were 0 - <10 cfu/100 ml.

**Table 4.** provides a summary of all bacteriological results performed on treated water.

## Table 4. – Microbiological Results for Point of Entry at Huron Sands Drinking Water System

		E. Coli	E. Coli		Total Coliform			HPC		
Date	# Samples	# Samples 0	# Samples ≥1	# Samples	# Samples 0	# Samples ≥1	# Samples	Safe	Deteriorating	
Jan	-	-	-	-	-	-	-	-	-	
Feb	-	-	-	-	-	-	-	-	-	
Mar	-	-	-		-	-	-	-	-	
Apr	2	2	0	2	2	0	2	2	0	
Мау	2	2	0	2	2	0	2	2	0	
Jun	3	3	0	3	3	0	3	3	0	
Jul	2	2	0	2	2	0	2	2	0	
Aug	2	2	0	2	2	0	2	2	0	
Sep	2	2	0	2	2	0	2	2	0	
Oct	3	3	0	3	3	0	3	3	0	
Nov	1	1	0	1	1	0	1	1	0	
Dec	-	-	-	-	-	-	-	-	-	
Total	17	17	0	17	17	0	17	17	0	

#### 3.2.3 Distribution System

Distribution samples are collected every two weeks and tested for E.Coli, Total Coliform and for Heterotrophic Plate Count (HPC). In 2020, a total of 17 distribution samples were collected and analyzed for the above parameters. All E. Coli and Total Coliform results from the treated water were 0 cfu/100 ml. The range of HPC results were 0 - <10 cfu/100 ml.

Table 5 provides a summary of all bacteriological samples taken in the distribution system.

	E. Coli			Total Coliform			HPC		
Date	# Samples	# Samples 0	# Samples ≥1	# Samples	# Samples 0	# Samples ≥1	# Samples	Safe	Deteriorating
Jan	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	_
Mar	-	-	-	-	-	-	-	-	_
Apr	2	2	0	2	2	0	2	2	0
Мау	2	2	0	2	2	0	2	2	0
Jun	3	3	0	3	3	0	3	3	0
Jul	2	2	0	2	2	0	2	2	0
Aug	2	2	0	2	2	0	2	2	0
Sep	2	2	0	2	2	0	2	2	0
Oct	3	3	0	3	3	0	3	3	0
Nov	1	1	0	1	1	0	1	1	0
Dec	-	-	-	_	-	-	-	-	-
Total	17	17	0	17	17	0	17	17	0

Table 5. – Microbiological Results for Huron Sands Distribution System

# 3.3 Chemical Sampling & Testing

#### 3.3.1 Inorganics

One treated water sample is taken every 60 months and tested for inorganics. The most recent samples for the Huron Sands Drinking Water System were collected on June 21, 2016 and submitted to the laboratory for analysis of inorganics as listed in Schedule 23. All parameters were found to be within compliance. Inorganics will be sampled and analyzed again on or before June 21, 2021.

Results from 2016 can be found in Table 6.

Parameter	Result (µg/L)	Maximum Allowable Concentration (µg/L)
Antimony	<0.02	6
Arsenic	4.5	10
Barium	30.2	1000
Boron	94	5000
Cadmium	0.004	5
Chromium	0.29	50
Mercury	<0.01	1
Selenium	<0.04	10
Uranium	1.43	20

Table 6. – Schedule 23 Results for Huron Sands Drinking Water System

<u>NOTE:</u> New regulation standards changed in 2018 for Arsenic. The previous standard of  $25\mu g/L$  changed to the new standard of  $10\mu g/L$ . The last sample taken in 2016 was within compliance at that time, the result was  $4.5\mu g/L$ . The next sample is required before June 21, 2021.

Consideration and discussion of this parameter should be investigated as soon as possible.

# 3.3.2 Lead

Schedule 15.1 of Ontario Regulation 170/03 requires that samples be taken once between June 15 and October 15. The Maximum Allowable Concentration for Lead is 10 mg/L. In the previous lead sampling seasons, pH and alkalinity samples were taken on August 18, 2020.

Lead is scheduled to be sampled again between June 15 and October 15 2021.

2020 results can be found in Table 7.

# Table 7. – Lead Sampling Program Results for Huron Sands Drinking Water System

	Lead (mg/L)	рН	Alkalinity (mg/L)
Jun-Oct	0.18	8.06	182

#### 3.3.3 Organics

One treated water sample is taken every 60 months and tested for schedule 24 organic parameters. The most recent samples were collected on June 21, 2016. All parameters were found to be within compliance. Organics will be sampled and analyzed again on or before June 21, 2021.

2016 sample results can be found in Table 8.

Table 8. - Schedule 24 Results for Huron Sands Drinking Water System

Parameter	Result (µg/L)	Maximum Allowable Concentration (µg/L)
Benzene	<0.32	1
Carbon Tetrachloride	<0.16	2
1,2-Dichlorobenzene	<0.41	200
1,4-Dichlorobenzene	<0.36	5
1,1-Dichloroethylene	<0.33	14
1,2-Dichloroethane	<0.35	5
Dichloromethane	<0.35	50
Monochlorobenzene	<0.3	80
Tetrachloroethylene	<0.35	30
Trichloroethylene	<0.43	50
Vinyl Chloride	<0.17	1
Diquat	<1	70
Paraquat	<1	10
Glyphosate	<1	280
Polychlorinated Biphenyls	<0.04	3
Benzo(a)pyrene	<0.004	0.01
2,4-dichlorophenol	<0.15	900
2,4,6-trichlorophenol	<0.25	5
2,3,4,6-tetrachlorophenol	<0.20	100
Pentachlorophenol	<0.15	60
Alachlor	<0.02	5
Atrazine+N-dealkylated metabolites	<0.01	5
Atrazine	<0.01	-
De-ethylated atrazine	<0.01	-
Azinphos-methyl	<0.05	20
Carbaryl	<0.05	90
Carbofuran	<0.01	90
Chlorpyrifos	< 0.02	90
Diazinon	<0.02	20
Dimethoate	<0.03	20
Diuron	< 0.03	150
Valathion	< 0.02	190
Methoxychlor	<0.01	900
Metolachlor	<0.01	50

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Metribuzin	<0.02	80
Phorate	<0.01	2
Prometryne	<0.03	1
Simazine	<0.01	10
Terbufos	<0.01	1
Triallate	<0.01	230
Trifluralin	<0.02	45
2,4-dichlorophenoxyacetic acid	<0.19	100
Bromoxynil	<0.33	5
Dicamba	<0.20	120
Diclofop-methyl	<0.40	9
MCPA	<0.00012	0.00012
Picloram	<1	190

#### 3.3.4 Trihalomethanes and Haloacetic Acids

One distribution sample is taken every three months from a point in the distribution system and tested for Trihalomethanes (THMs) and Haloacetic Acids (HAAs). In 2020, samples were collected during the months of May, August and November. The Ontario Drinking Water Quality Standard (ODWQS) has set a Maximum Allowable Concentration (MAC) of 100 µg/L for THMs and it is expressed as a running annual average. In 2020 the new HAA MAC will be 80µg/L. Huron Sands has qualified for THM relief for 2020.

In 2019, the average THM was found to be 10.33  $\mu\text{g/L},$  which is within compliance.

Refer to Table 9 for the summary of THMs and HAAs results.

#### 3.3.5 Nitrate & Nitrite

One treated water sample is taken every three months and tested for nitrate and nitrite. In 2020 samples were collected during the months of May, August and November. The Ontario Drinking Water Quality Standard (ODWQS) have set a Maximum Allowable Concentration (MAC) of 1 mg/L for nitrites and 10 mg/L for nitrates. The results were found to be within compliance.

#### Refer to Table 9.

	Nit	rate	Ni	trite		Ms 19	НА	As
Date	# Samples	Result (mg/L)	# Samples	Result (mg/L)	# Samples	Result (µg/L)	# Samples	Result (µg/L)
May	1	<0.006	1	<0.003	1	7.0	1	<5.3
Aug	1	<0.006	1	<0.003	1	11	1	<5.3
Nov	1	<0.006	1	<0.003	1	13	1	<5.3
Total	3		3		3		3	
Average		<0.006		<0.003		10.33		<5.3
Maximum		<0.006		<0.003		13		<5.3

Table 9. - Nitrate, Nitrite, THM and HAA Results at Huron Sands Drinking Water System

#### 3.3.6 Sodium

One water sample is collected every 60 months and tested for Sodium. O. Reg 170/03 has set a Maximum Acceptable concentration (MAC) of 20 mg/L for Sodium which requires the Medical Office of Health be notified if the concentration exceeds the MAC. These samples were last collected on June 21, 2016 and were found to be 18.2 mg/L, which is within compliance. The next water sample for Sodium will be collected and analyzed on or before June 21, 2021.

# 3.3.7 Fluoride

One water sample is collected at least once in every 60 months and tested for Fluoride. The Ontario Drinking Water Quality Standards (ODWQS) have set a MAC of 1.5 mg/L. On August 22, 2017 and August 25, 2017 a sample was collected for this analysis. The first sample was found to have a concentration of 2.13 mg/L and the second set came back at 2.19 mg/L, which are both greater than the MAC. This is due to high levels of naturally occurring fluoride in the aquifer.

For more information see: <u>http://www.acwtownship.ca/wordpress/wp-content/uploads/2013/09/HuronSands.pdf</u>.

The next water sample for Fluoride will be collected and analyzed on or before August 22, 2022.

# 4.0 WATER AND CHEMICAL USAGE

## 4.1 Chemical Usage

From January 1, 2020 to December 31, 2020. 11.50 kg of sodium hypochlorite was used to ensure proper disinfection in the distribution system with an average dosage of 4.93 mg/L. 73.20 kg of sodium silicate was used in 2020 to reduce the concentration of dissolved iron.

# Refer to Table 10.

	Sodium I	Sodium Hypochlorite	
Date	Usage (kg)	Average Dosage (mg/L)	Usage (kg)
Jan	-	-	-
Feb	-	-	-
Mar	-	-	-
Apr	0.78	2.15	5.28
Мау	1.25	2.75	10.24
Jun	1.67	4.78	11.12
Jul	2.18	3.90	15.49
Aug	2.01	4.55	12.64
Sep	1.41	5.83	9.78
Oct	1.84	6.80	6.44
Nov	0.36	8.69	2.21
Dec	-	-	-
Total	11.50		73.20
Average		4.93	

Table 10. – Chemical Usage at Huron Sands Drinking Water System

#### **4.2 Annual Flows**

A summary of the water supplied to the distribution system in 2020 is provided in **Table 11.** This Table provides a breakdown of the monthly flow provided to the distribution system.

Flow meters were calibrated on June18, 2020 by Indus Control and were found to be acceptable.

Date	Average Daily Flow (m³)	Maximum Daily Flow (m <sup>3</sup> )	Total Monthly Flow (m³)
Jan	-	-	-
Feb	-	-	-
Mar	-	-	-
Apr	5.40	8	135
May	8.38	12	263
Jun	11.87	18	356
Jul	18.29	29	567
Aug	14.26	18	442
Sep	9.30	15	279
Oct	6.27	13	188
Nov	3.25	5	52
Dec	-	-	-
Average	9.65		
Мах		29	
Total			2262

Table 11. – Treated Water Flows for Huron Sands Drinking Water System

# 5.0 IMPROVEMENTS TO SYSTEM AND ROUTINE AND PREVENTATIVE MAINTENANCE

The following summarizes water system improvements for the Huron Sands Drinking Water System:

• South Sample Station was replaced.

# 6.0 MINISTRY OF THE ENVIRONMENT INSPECTIONS AND REGULATORY ISSUES

The Huron Sands Drinking Water System was inspected by the Ministry of Environment, Conservation and Parks on September 8, 2020 by Matthew Shannon.

There were no non-compliances. The rating was 100%

There were no Instances of adverse water quality:

There were 4 PBWN:

- April 3<sup>rd</sup> for the start up of the system.
- September 1<sup>st</sup>, due to a loss of pressure from a power outage.
- October 25<sup>th</sup>, due to a loss of pressure from a power outage.
- November 1<sup>st</sup>, due to a loss of pressure from a power outage.

# 7.0 MECP Regulatory Changes

It should be noted that there will be some upcoming changes to Ontario Regulation 170/03 and Ontario Regulation 169/03 that strengthen standards and clarify testing requirements as follows: Change noted in Table 6 and 8.

- Strengthen standards for Arsenic, Carbon Tetrachloride, Benzene, and Vinyl Chloride;
- Adopt new standards for Chlorate, Chlorite, 1-Methyl-4-Chlorophenoxyacetic acid (MCPA) and Haloacetic Acids (HAAs); (NOTE: Chlorate and Chlorite testing is only required for Municipal Drinking Water Systems using Chlorine Dioxide treatment equipment.)
- Clarify/optimize testing, sampling and reporting requirements for Trihalomethanes (THMs) and HAAs; and
- Remove 13 pesticides from testing requirements.

The aforementioned amendments will be phased in over the next four years to allow system owners and/or operators the opportunity to collect baseline information and complete required system upgrades. Currently, the new sampling, testing, reporting and re-sampling requirements, and the removal of 13 pesticides came into effect January 1, 2016. As well, testing requirements for HAAs and updates to standards for Carbon Tetrachloride, Benzene, Vinyl Chloride, Chlorate, Chlorite, and MCPA came into effect January 2017.

Refer to Table 12 for the new Regulatory Requirements. Subsequent phase-in dates are:

- January 1, 2018: Updates to standards for Arsenic come into effect / require reporting
- January 1, 2020: New standards for HAAs and HAAs testing optimization rule for smaller systems will come into effect / require reporting.

Parameter	Previous Requirement		Amended F	Requirement
	MAC	1⁄2 MAC	MAC	1⁄2 MAC
Arsenic	25 µg/L	12.5 µg/L	10 µg/L	5 µg/L
Benzene	5 µg/L	2.5 μg/L	1 µg/L	0.5 µg/L
Carbon Tetrachloride	5 µg/L	2.5 µg/L	2 µg/L	1 µg/L
Vinyl Chloride	2 µg/L	1 µg/L	1 µg/L	0.5 µg/L

Table 12 - Regulatory Requirements



# **Lakeshore Annual and Summary Report**

For the 2020 Operating Year

# **PREPARED BY:**

Veolia Water Canada 100 Cove Road, Box 185 Goderich, ON N7A 3Z2 Author: Nancy Mayhew

# **TO:** Township of Huron-Kinloss Box 130 21 Queen Street Ripley, ON NOG 2R0





7.1.2 e)

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# 1.0 EXECUTIVE SUMMARY

The purpose of this report is to provide information to system Owners and Stakeholders to satisfy the regulatory requirements of the following:

- Safe Drinking Water Act (SDWA)
- Drinking Water Quality Management Standard (DWQMS)
- Section 81 of the Clean Water Act (CWA)
- Reporting required under Ontario Regulation (O. Reg.) 170/03, Section 11
- Reporting required under O. Reg. 170/03, Schedule 22

The Operating Authority (Veolia), on behalf of the Owner (Township of Huron-Kinloss), has prepared this report as a compilation of information that demonstrates the ongoing provision of a safe, consistent supply of high quality drinking water to customers supplied by the Lakeshore Drinking Water System.

# SAFE DRINKING WATER ACT

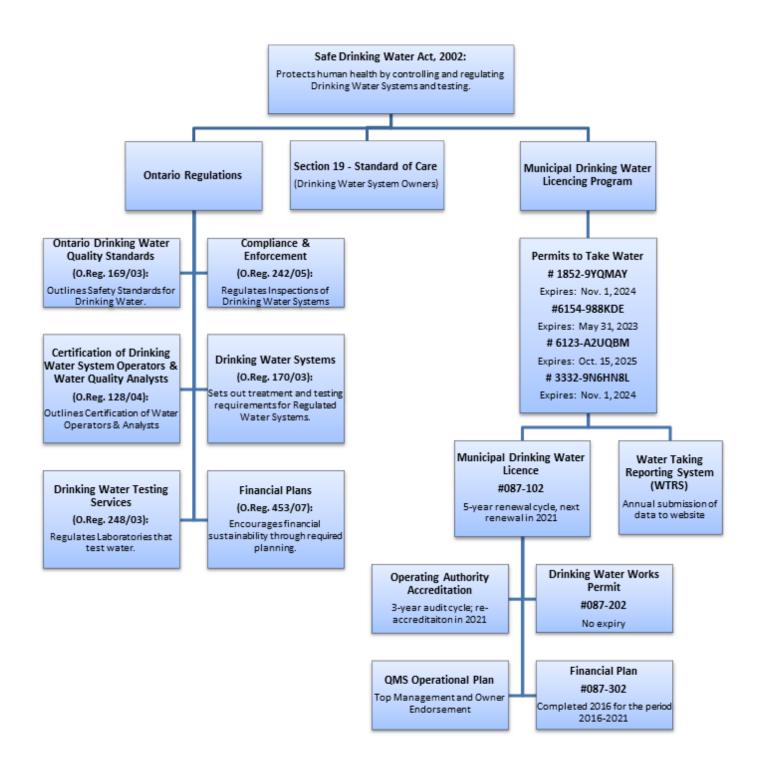
Following the Walkerton Tragedy in 2000, the Ontario Government developed a new, comprehensive legislative paradigm based on a source-to-tap, multi-barrier approach to the protection of drinking water. The *Safe Drinking Water Act (SDWA)*, 2002, and its Regulations, contain requirements for Municipalities that provide potable water to their residents.

Under Section 19 (Standard of Care of the SDWA), Owners of a Drinking Water System are required to:

- a) exercise the level of care, diligence and skill in respect of a Municipal Drinking Water System that a reasonably prudent person would be expected to exercise in a similar situation; and
- b) act honestly, competently and with integrity, with a view to ensuring the protection and safety of the users of the Municipal Drinking Water System.
   2002, c. 32, s. 19(1).

The following chart outlines key aspects of the *SDWA* that relate to the Lakeshore Drinking Water System:

# Legislative Framework for the Lakeshore Drinking Water System



# 2.0 **REPORTING REQUIREMENTS:**

This report intends to provide relevant information to help the Township of Huron-Kinloss, its Council, as Owners of the Lakeshore Drinking Water System, meet the Standard of Care. Its contents are organized as follows, according to specific reporting requirements under the *SDWA*:

# O. REG. 170/03, SECTION 11 - ANNUAL REPORT

- The Owner shall ensure an annual report is prepared as per O. Reg. 170/03, s. 11(1)
- The Owner of a Drinking Water System (DWS) that supplies water to another DWS shall provide a copy of the annual report to the system that receives the water (Courtney Subdivision Ashfield-Colborne-Wawanosh)
- The annual report must cover the period of January 1 to December 31 in a year and must be prepared not later than February 28 of the following year
- The annual report must:
  - Contain a brief description of the DWS, including a list of water treatment chemicals used
  - Summarize any reports made to the Ministry under s.s. 18(1) of the Act, or Sch. 16 (16-4)
  - Summarize the results of tests made under O. Reg. 170/03 and the Municipal Drinking Water Licence (MDWL)
  - Describe any corrective actions taken under Sch. 17
  - Describe any major expenses to install, repair or replace required equipment
  - Include a statement of where a report prepared as per Sch. 22 will be available for inspection under s.s. 12(4)
  - Specify the number of points sampled as per s.s. 15.1-4(2) or s.s. 15.1-5(5), the number of samples taken, and the number of points where a sample exceeded the prescribed standard for lead
- The Owner shall ensure that a copy of an annual report for a system is given, without charge, to every person who requests a copy
- If a DWS is connected to and receives all of its drinking water from another DWS, the Owner of the system that receives the water shall ensure that a copy of an annual report for the DWS that supplies water is given, without charge, to every person who requests a copy
- Every time that an annual report is prepared for a DWS, the Owner of the system shall ensure that effective steps are taken to advise users of water from the system that copies of the report are available, without charge, and of how a copy may be obtained.

# O. REG. 170/03, SCHEDULE 22 - SUMMARY REPORT FOR MUNICIPALITIES

- The Owner of a DWS shall ensure that, not later than March 31 of each year, a report is prepared as per s.s. (2) and (3) for the preceding year and is given to:
  - in the case of a DWS owned by a Municipality, the members of the Municipal Council;
  - in the case of a DWS owned by a Municipal Service Board established under s. 195 of the *Municipal Act, 2001*, the members of the Municipal Service Board; or
  - $\circ$  in the case of a DWS owned by a Corporation, the Board of Directors of the Corporation
- The summary report must,
  - list the requirements of the Act, the Regulations, the system's approval, Drinking Water Works Permit (DWWP), MDWL, and any Orders applicable to the system that were not met at any time during the period covered by the report; and
  - for each requirement referred to above that was not met, specify the duration of the failure and the measures that were taken to correct the failure.
- The summary report must also include the following information for the purpose of enabling the Owner of the DWS to assess the capability of the system to meet existing and planned uses of the system:
  - A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows;
  - A comparison of the summary referred to above to the rated capacity and flow rates approved in the system's approval, DWWP or MDWL, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5(4), to the flow rates specified in the written agreement.
- If a report is prepared under s.s. (1) for a system that supplies water to a Municipality under the terms of the contract, the Owner of the DWS shall give a copy of the report to the Municipality by March 31.

# MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS (MECP) INSPECTION REPORT

• In 2006, the MECP introduced a comprehensive inspection program for Municipal Residential Drinking Water Systems. The objectives of this program are to determine compliance with the *SDWA* and associated regulations; to encourage the continuous improvement of the Drinking Water System; and to establish a process to measure these improvements.

# MUNICIPAL DRINKING WATER MANAGEMENT REVIEW

• The *SDWA*, through Municipal Drinking Water System Licensing Program, requires that the Township maintain an accredited Quality Management System (QMS) for its drinking water system. This review communicates to Council the key information related to the QMS and the Municipal Drinking Water Licencing Program.

#### QMS OPERATIONAL PLAN

• The *SDWA*, through the Municipal Drinking Water Licensing Program, requires that a Municipal Drinking Water System Owner (Council) endorse the most current version of the QMS Operational Plan. This document, once endorsed, is posted on the Township of Huron-Kinloss website and is available at the Operations Centre.

The Township of Huron-Kinloss is approved by the MECP to operate a Class 3 Distribution and Supply System through its MDWL # 087-102, and to alter the system through it DWWP # 087-202.

The MECP "Municipal Drinking Water Systems" web portal provides the most current version of the *Act* and its regulations and can be found:

https://www.ontario.ca/page/municipal-drinking-water-systems-licencing-registration-and-permits

# 3.0 DESCRIPTION OF WATER SYSTEM (O. Reg. 170/03, s. 11 (6) (a))

A summary of the Lakeshore Drinking Water System description is outlined below:

Drinking Water System Number:	220000425
Drinking Water System Name:	Lakeshore Well Water Distribution and Supply
Drinking Water System Owner:	Corporation of the Township of Huron-Kinloss
Drinking Water System Category:	Large Municipal Residential
Drinking Water System Classification:	Water Distribution and Supply Subsystem Class 3
Drinking Water System Certificate No.:	1808
Daily Maximum Water Supply Capacity:	11,636.26 m <sup>3</sup>
Disinfection Chemicals:	Sodium Hypochlorite, 12%
Iron Sequestering Chemicals:	Sodium Silicate (N), undiluted
Population (as per Engineer's Design notes):	3,200
Total Number of Service Connections:	2,324
Estimated Seasonal Population:	6,042 (based on Census data of 2.6 persons per household)
Average Day Demand:	1,925.33 m³
Peak Day Demand:	5,263.06 m³ (July 5, 2020)
Average Capacity:	16.59%
Peak Capacity:	45.23%
Distribution Network:	64 km
Fire Hydrants:	198
Blow-offs:	43

The Lakeshore Drinking Water Distribution and Supply Subsystem (LDWDSS) is characterized as a "secure groundwater system". It consists of four sub-systems (well supplies), that deliver potable water to the Huron-Kinloss Lakeshore Community, extending from Point Clark in the south, to Huronville in the north, and to the Courtney/Amberley Beach subdivision in the Township of Ashfield-Colborne-Wawanosh. The Township of Huron-Kinloss has an agreement with The Township of Ashfield-Colborne-Wawanosh, where the Courtney/Amberley Beach Subdivision is treated as part of the Lakeshore Drinking Water System.

The four sub-systems are: Point Clark, Blairs Grove, Huronville South, and Murdoch Glen. All of these sites are located within the Township of Huron-Kinloss along Lake Huron. All sites are controlled, monitored, and alarmed through a Supervisory Control and Data Acquisition (SCADA) system which is connected to the main controller, autodialer, and server at the Ripley Municipal Office. The desktop computer used by the system's operators is located at the Ripley Township Shed and is connected remotely to the SCADA server. As a redundancy, each site is also equipped with an auto-dialer that is independent of the SCADA system, and is used to call out alarms in the event of communications/SCADA failure. This SCADA system provides the operator with the ability to monitor current operating status of the supply and treatment equipment throughout the water system at any given time via remote access by computer or Smartphone, and to have control over operations.

The Township of Huron-Kinloss also has an agreement with the Municipality of Kincardine, where Kincardine is the Operating Authority for a small area of Huron-Kinloss known as the Huronville Subdivision Distribution System (Plan M28). This subdivision received all their water from the Municipality of Kincardine Water System. There is an interconnecting valve between the LDWDSS and Huronville Subdivision Distribution System, and the Town of Kincardine. This valve is normally closed and is used for emergency purposes only.

The four well supplies are detailed as follows:

#### Site: Point Clark - 603 Tuscarora Road

- Water Source: Groundwater, Non-GUDI
- Number of Production Wells: 2 (Well # 2 1994; Well # 3 2015)
- Depth of Wells: 75.6 m; 82.3 m
- Well Pumps: 15 hp each (submersible)
- Disinfection: Sodium hypochlorite (12%)
- CT Requirement: 2-log, 5°C, baffled reservoir (0.5 BF)
- Iron Sequestering: Sodium silicate (undiluted)
- High Lift Pumps: 2 (25 hp each)
- Reservoir: 65 m<sup>3</sup>
- Permit To Take Water: 1852-9YQMAY, expires November 1, 2024

#### Site: Blairs Grove - 28 Cathcart Street

- Water Source: Groundwater, Non-GUDI
- Number of Production Wells: 1 (1982, flowing artesian)
- Depth of Well: 69.5 m
- Well Pump: 10 hp (submersible)
- Disinfection: Sodium hypochlorite (12%)
- CT Requirement: 2-log, 5°C, baffled reservoir (0.5 BF)
- Iron Sequestering: Sodium silicate (undiluted)
- High Lift Pump: 1 (30 hp)
- Reservoir: 83 m<sup>3</sup>
- Permit To Take Water: 6154-988KDE, expired December 17, 2020

**NOTE:** The Blairs Grove production well (Well 2) casing failed in August 2020. The well supply was taken off-line for the remainder of the year, and the monitoring well (Well 3) was approved as the new supply (new PTTW # 5776-BW6SKS, expires December 17, 2030) in December 2020, but was not equipped in 2020.

#### Site: Murdoch Glen - 815 Parkplace

•	Water Source:	Groundwater, Non-GUDI
•	Number of Production Wells:	1 (1992)
•	Depth of Well:	80.5 m
•	Well Pump:	25 hp (submersible)
•	Disinfection:	Sodium hypochlorite (12%)
•	CT Requirement:	2-log, 5°C, contact watermain (BF 1.0)
•	Iron Sequestering:	Sodium silicate (undiluted)
•	High Lift Pumps:	4 total; 2 (15 hp each), 2 (50 hp each)
•	Reservoir:	400 m <sup>3</sup>
•	Standby Dowor:	120 kW Diosal Congrator (1 100 L fuel storage)

Standby Power: 130 kW Diesel Generator (1,100 L fuel storage)
 Permit To Take Water: 6123-A2UQBM, expires October 15, 2025

# Site: Huronville South - 39 Penetangore Row South

- Water Source: Groundwater, Non-GUDI
- Number of Production Wells: 1 (1994)
- Depth of Well: 93.3 m
- Well Pump: 30 hp (submersible, soft-start)
- Disinfection: Sodium hypochlorite (12%)
- CT Requirement: 2-log, 5°C, baffled reservoir (BF 0.5)
- Iron Sequestering: Sodium silicate (undiluted)
- High Lift Pumps: 2 (30 hp each)
- Reservoir: 65 m<sup>3</sup>
- Permit To Take Water: 3332-9N6H8L, expires November 1, 2024

The LDWDSS currently (December 2020) has a distribution network with a combination of PVC and polyethylene water mains, in sizes varying between 1-inch and 10-inch diameter. The Lakeshore area has a large seasonal population of potentially 6,042 (based on Census data of 2.6 people per household connection x 2,324 connections), and therefore, the demands are significantly higher during the cottage season.

All the Lakeshore wells are secure, deep bedrock wells that penetrate limestone aquifers. Due to the depth and structure of the aquifers, the water temperature is relatively constant (< 10°C), turbidity is low, and the water is relatively hard. The raw water is also relatively **high in naturally-occurring sodium, fluoride and iron**, but the lead content of the raw water is well below the half-MAC (Maximum Allowable Concentration). Iron sequestering is achieved by means of treating the water with sodium silicate. Sequestering does not remove iron, but instead it prevents the dissolved iron from precipitating. When iron is precipitated, it can lead to stained plumbing fixtures and appear as discolouration in the water. Sodium silicate can leave a slight metallic taste in the water. Those who are supplied from the LDWDSS are made aware of the various concentrations in their drinking water by numerous means of communication from the Township of Huron-Kinloss.

A 130 kW diesel generator, located at the Murdoch Glen pumphouse, includes a 1,100 L capacity fuel storage tank and is used for emergency power supply. A standpipe is situated in the Point Clark area at 3405 Concession 2, and is constructed of bolted steel (1996). The 31 m (102 ft) high and 9.45 m (31 ft) diameter standpipe has an effective storage of approximately 1,500 m<sup>3</sup> to supply the entire Lakeshore System in emergency situations. Periodic inspections of the standpipe (exterior and interior) are conducted. In 2017, the standpipe was isolated, drained, cleaned, and had some minor repairs. After repairs, it was disinfected, flushed, sampled, and put back into service.

# 4.0 SUMMARY OF REPORTS MADE TO THE MINISTRY (O. Reg. 170/03, s. 11 (6) (b))

• There were no Adverse Water Quality Indicators (AWQIs) in 2020.

# 5.0 SUMMARY OF WATER QUALITY MONITORING (O. Reg. 170/03, s. 11 (6) (c))

The purpose of sampling and testing is to confirm that water is safe for human consumption and to provide a comprehensive track record.

Table 1 -	Water Quality Monitoring Requirements:

Parameter	Description	Required # of Samples	Requirement Source
Chlorine Residual (grab)	For monitoring amount of residual in system, and confirming of water quality following maintenance	365/year (1 daily)	O. Reg. 170/03, Sch. 7
Chlorine Residual (continuous monitoring)Continuous monitoring equipment used sample and test treated water at the loc where intended contact time has been completed		5 minute intervals, minimum	O. Reg. 170/03, Sch. 7
E. Coli (EC) Total Coliform (TC) Heterotrophic Plate Count (HPC)	Total Coliform (TC)         For testing presence of microbiological activity		O. Reg. 170/03, Sch. 10
Inorganics and Organics	For testing presence of metals, pesticides and herbicides	36 month interval	O. Reg. 170, Sch 13, s. 13-2 (Sch 23), and s. 13-4 (Sch 24)
Trihalomethanes (THMs)	For testing presence of disinfection by-products (DBPs)	4/year (quarterly)	O. Reg. 170/03, Sch. 13, s. 13-6
Lead (Pb)	For testing presence of lead in the distribution system only - not private side	36 month interval (pH and alkalinity annually)	O. Reg. 170/03, Sch. 15; MDWL #087-102, Sch. D
Haloacetic Acids (HAAs)	For monitoring the formation of disinfection by-products (DBPs)	4/year (quarterly)	O. Reg. 170/03, Sch. 13, s. 13-6.1
Nitrate and Nitrite	For testing presence of nitrates and nitrites in the treated water at Point-of-Entry	4/year (quarterly)	O. Reg. 170/03, Sch. 13, s. 13-7
Sodium	For testing presence of sodium in the treated water at Point-of-Entry	60 month interval	O. Reg. 170/03, Sch. 13, s. 13-8
Fluoride	For testing presence of fluoride in the treated water at Point-of-Entry	60 month interval	O. Reg. 170/03, Sch. 13, s. 13-9

# COMMUNICATIONS WHEN ADVERSE WATER SAMPLES ARE IDENTIFIED

#### Requirement - Laboratory

A water sample that does not meet Provincial water quality standards is considered "adverse". When adverse water quality is detected, the accredited laboratory conducting the testing will immediately notify the Operating Authority, the Spills Action Centre (SAC), and the office of Grey Bruce Health Services, and occasionally the office of Huron-Perth Public Health (as necessary, if applicable). This notification is made by telephone through live communication to a person in authority. In addition to the phone calls, a fax of the sample results is sent to these agencies to verify the live communication made earlier.

## Requirement - Drinking Water System Owner/Operating Authority

The *SDWA* also requires the Drinking Water System Owner/Operating Authority to immediately notify the MECP and the Grey Bruce Health Services office and the Huron-Perth Public Health office (if applicable), that the laboratory notice has been received and that "corrective actions" are being initiated. The method of contact is by telephone to a person of authority. The Operating Authority also faxes Form 2A - Notices of Adverse Test Results and Issue Resolution (Schedule 16) within 24 hours to both agencies first to verify previous live communication. Once the issue has been resolved and to confirm that corrective actions have been completed, the Operating Authority also faxes Form 2B - Notices of Adverse Test Results and Issue Resolution (Schedule 16) within 7 days to the agencies. This reporting system provides assurance that the DWS Owner is complying with the applicable regulations and that appropriate corrective actions are being reported.

#### 5.1 Water Treatment Equipment Operation and Monitoring

#### 5.1.1 Treated Water (Point of Entry) Free Chlorine Residuals (Grab Samples)

In 2020, a total of 1,332 treated water grab samples were collected and analyzed for free chlorine residual at the point of entry (POE) using a Hach pocket chlorine colorimeter. **Table 2** shows the grab samples monthly average of free chlorine residual values. **Table 3** shows the on-line continuous samples monthly average (as collected by SCADA) of the free chlorine residual values. NOTE: Roads were closed on February 28th due to inclement conditions so TW residuals were not taken that day.

# 5.1.2 Distribution Free Chlorine Residuals (Grab Samples)

In 2020, a total of 680 distribution residuals were collected: 366 daily grab residuals and an additional 314 weekly grab residuals were taken in conjunction with the required weekly microbiological sampling. A summary of all the residuals collected is presented in **Table 2**.

Month	Blairs Grove	Huronville South	Murdoch Glen	Point Clark	Distribution
Jan	1.33	1.58	1.74	1.52	1.36
Feb	1.29	1.53	1.53	1.47	1.35
Mar	1.26	1.51	1.2	1.48	1.31
Apr	1.37	1.52	1.56	1.54	1.26
May	1.49	1.64	1.58	1.51	1.28
Jun	1.47	1.63	1.62	1.53	1.29
Jul	1.55	1.62	1.69	1.52	1.36
Aug	1.52	1.47	1.70	1.64	1.38
Sep	off-line	1.61	1.73	1.55	1.32
Oct	off-line	1.56	1.76	1.56	1.32
Nov	off-line	1.51	1.76	1.59	1.28
Dec	off-line	1.57	1.61	1.61	1.29
CT Requirement	0.22	0.40	0.26	0.32	0.20
Annual Min	1.08	1.35	1.10	1.32	0.86
Annual Max	2.20	1.88	1.91	1.81	1.75
Annual Avg	1.41	1.56	1.66	1.54	1.35
# Samples	237	365	365	365	680

#### Table 2 Average Treated and Distribution Free Chlorine Residuals (Grab Samples)

Month	Blairs Grove	Huronville South	Murdoch Glen	Point Clark
Jan	1.33	1.59	1.77	1.52
Feb	1.29	1.52	1.56	1.48
Mar	1.29	1.51	1.64	1.50
Apr	1.37	1.52	1.58	1.57
Мау	1.54	1.64	1.60	1.53
Jun	1.55	1.63	1.64	1.54
Jul	1.59	1.62	1.71	1.53
Aug	1.54	1.46	1.70	1.65
Sep	1.35	1.59	1.77	1.55
Oct	1.32	1.56	1.79	1.57
Nov	off-line	1.51	1.79	1.60
Dec	off-line	1.57	1.63	1.62
<b>CT Requirement</b>	0.22	0.40	0.26	0.32
Annual Min	0.82	1.40	1.50	1.21
Annual Max	1.95	1.87	1.94	1.77
Annual Avg	1.42	1.56	1.68	1.56

## Table 3 Average Treated Free Chlorine Residuals (On-Line Continuous from SCADA)

#### 5.1.3 Raw and Treated Water Turbidity

Raw water and treated water grab samples were collected and analyzed for turbidity using a portable turbidity analyzer. **Table 4** provides a summary of raw water turbidity results and **Table 5** provides a summary of treated water turbidity results.

#### Table 4 -Raw Water Turbidity Results

Month	Blairs Grove	Huronville South	Murdoch Glen	Point Clark W2	Point Clark W3
Jan	0.91	0.11	0.19	0.18	0.23
Feb	0.97	0.12	0.23	0.25	0.20
Mar	0.90	0.15	0.23	0.50	0.19
Apr	0.84	0.12	0.29	0.27	0.24
Мау	0.92	0.12	0.29	0.28	0.22
Jun	0.46	0.13	0.27	0.24	0.26
Jul	0.80	0.22	0.33	0.26	0.26
Aug	1.12	0.20	0.25	0.27	0.22
Sep	off-line	0.20	0.32	0.31	0.26
Oct	off-line	0.28	0.29	0.31	0.31
Nov	off-line	0.31	0.32	0.40	0.27
Dec	off-line	0.28	0.28	0.35	0.31
Annual Min	0.38	0.10	0.13	0.18	0.11
Annual Max	1.63	0.32	0.43	0.92	0.32
Annual Avg	0.87	0.19	0.27	0.30	0.25
# Samples	30	47	47	47	46

Month	Blairs Grove	Huronville South	Murdoch Glen	Point Clark
Jan	0.26	0.11	0.19	0.20
Feb	0.59	0.12	0.22	0.20
Mar	0.40	0.19	0.25	0.20
Apr	0.44	0.17	0.24	0.20
Мау	0.50	0.16	0.25	0.27
Jun	0.28	0.17	0.25	0.22
Jul	0.90	0.21	0.30	0.25
Aug	0.74	0.22	0.28	0.27
Sep	off-line	0.27	0.32	0.29
Oct	off-line	0.28	0.32	0.30
Nov	off-line	0.36	0.32	0.31
Dec	off-line	0.31	0.32	0.32
Annual Min	0.19	0.11	0.19	0.17
Annual Max	0.93	0.38	0.36	0.34
Annual Avg	0.51	0.21	0.27	0.25
# Samples	29	45	44	44

# Table 5 Treated Water Turbidity Results

# 5.2 Microbiological Sampling per Schedule 10, O. Reg. 170/03

#### 5.2.1 Raw Water Samples

Raw water samples are collected every week. In 2020, a total of 246 samples were collected and analyzed for E. Coli and Total Coliform. **Tables 6, 7, 8, 9 and 10** provide summaries of microbiological results performed on the raw water.

#### Microbiological Results for Raw Water

#### Table 6 - BLAIRS GROVE - RAW

N A - math		Total Coliform		E. Coli			
Month	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	
Jan	4	4	0	4	4	0	
Feb	4	4	0	4	4	0	
Mar	5	5	0	5	5	0	
Apr	4	4	0	4	4	0	
May	4	4	0	4	4	0	
Jun	5	5	0	5	5	0	
Jul	4	4	0	4	4	0	
Aug	4	4	0	4	4	0	
Sep	offline	offline	offline	offline	offline	offline	
Oct	offline	offline	offline	offline	offline	offline	
Nov	offline	offline	offline	offline	offline	offline	
Dec	offline	offline	offline	offline	offline	offline	
TOTAL	34	34	0	34	34	0	

# Microbiological Results for Raw Water Continued

# Table 7 -HURONVILLE SOUTH - RAW

Month		Total Coliform		E. Coli		
	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1
Jan	4	4	0	4	4	0
Feb	4	4	0	4	4	0
Mar	5	5	0	5	5	0
Apr	4	4	0	4	4	0
Мау	4	4	0	4	4	0
Jun	5	5	0	5	5	0
Jul	4	4	0	4	4	0
Aug	4	4	0	4	4	0
Sep	5	5	0	5	5	0
Oct	4	4	0	4	4	0
Nov	4	4	0	4	4	0
Dec	5	5	0	5	5	0
TOTAL	52	52	0	52	52	0

#### Table 8 - MURDOCH GLEN - RAW

Month		Total Coliform		E. Coli			
	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	
Jan	4	4	0	4	4	0	
Feb	4	4	0	4	4	0	
Mar	5	5	0	5	5	0	
Apr	4	4	0	4	4	0	
Мау	4	4	0	4	4	0	
Jun	5	5	0	5	5	0	
Jul	4	4	0	4	4	0	
Aug	4	4	0	4	4	0	
Sep	5	5	0	5	5	0	
Oct	4	4	0	4	4	0	
Nov	4	4	0	4	4	0	
Dec	5	5	0	5	5	0	
TOTAL	52	52	0	52	52	0	

#### Microbiological Results for Raw Water Continued

#### Table 9 -POINT CLARK WELL # 2 - RAW

Month		Total Coliform		E. Coli			
	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	
Jan	4	4	0	4	4	0	
Feb	6	6	0	6	6	0	
Mar	5	5	0	5	5	0	
Apr	4	4	0	4	4	0	
Мау	4	4	0	4	4	0	
Jun	5	5	0	5	5	0	
Jul	4	4	0	4	4	0	
Aug	4	4	0	4	4	0	
Sep	5	5	0	5	5	0	
Oct	4	4	0	4	4	0	
Nov	4	4	0	4	4	0	
Dec	5	5	0	5	5	0	
TOTAL	54	54	0	54	54	0	

#### Table 10 - POINT CLARK WELL # 3 - RAW

Month		Total Coliform		E. Coli		
	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1
Jan	4	4	0	4	4	0
Feb	4	4	0	4	4	0
Mar	5	5	0	5	5	0
Apr	4	4	0	4	4	0
Мау	4	4	0	4	4	0
Jun	5	5	0	5	5	0
Jul	4	4	0	4	4	0
Aug	4	4	0	4	4	0
Sep	5	5	0	5	5	0
Oct	4	4	0	4	4	0
Nov	4	4	0	4	4	0
Dec	5	5	0	5	5	0
TOTAL	52	52	0	52	52	0

# 5.2.2 Treated Water (Point of Entry) Samples

One (1) treated water sample from each point of entry is taken every week and analyzed for E. Coli, Total Coliform, and Heterotrophic Plate Count (HPC). In 2020, a total of 212 treated water samples were collected and analyzed for the above parameters. Each EC and TC result from the treated water was 0 cfu/100 mL. The range of HPC results were 0 - 44 cfu/100 mL. **Table 11, 12, 13, and 14** provide summaries of all microbiological results performed on treated water.

# Microbiological Results for Treated Water (Point of Entry)

# Table 11 - BLAIRS GROVE

		Total Coliform			E. Coli			HPC	
Month	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥44
Jan	4	4	0	4	4	0	4	4	0
Feb	4	4	0	4	4	0	4	3	1
Mar	5	5	0	5	5	0	5	2	3
Apr	4	4	0	4	4	0	4	4	0
May	4	4	0	4	4	0	4	3	1
Jun	5	5	0	5	5	0	5	5	0
Jul	4	4	0	4	4	0	4	3	1
Aug	4	4	0	4	4	0	4	3	1
Sep	offline	offline	offline	offline	offline	offline	offline	offline	offline
Oct	offline	offline	offline	offline	offline	offline	offline	offline	offline
Nov	offline	offline	offline	offline	offline	offline	offline	offline	offline
Dec	offline	offline	offline	offline	offline	offline	offline	offline	offline
TOTAL	34	34	0	34	34	0	34	27	7

# Table 12 -HURONVILLE SOUTH

		Total Coliform			E. Coli			HPC	
Month	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥44
Jan	4	4	0	4	4	0	4	0	4
Feb	4	4	0	4	4	0	4	3	1
Mar	5	5	0	5	5	0	5	2	3
Apr	4	4	0	4	4	0	4	4	0
May	4	4	0	4	4	0	4	4	0
Jun	5	5	0	5	5	0	5	2	3
Jul	4	4	0	4	4	0	4	4	0
Aug	4	4	0	4	4	0	4	2	2
Sep	5	5	0	5	5	0	5	5	0
Oct	4	4	0	4	4	0	4	4	0
Nov	4	4	0	4	4	0	4	4	0
Dec	5	5	0	5	5	0	5	0	5
TOTAL	52	52	0	52	52	0	52	34	18

# Microbiological Results for Treated Water (Point of Entry)

# Table 13 - MURDOCH GLEN

		Total Coliform			E. Coli			HPC	
Month	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥44
Jan	4	4	0	4	4	0	4	1	3
Feb	4	4	0	4	4	0	4	3	1
Mar	5	5	0	5	5	0	5	2	3
Apr	4	4	0	4	4	0	4	3	1
May	4	4	0	4	4	0	4	4	0
Jun	5	5	0	5	5	0	5	5	0
Jul	4	4	0	4	4	0	4	4	0
Aug	4	4	0	4	4	0	4	3	1
Sep	5	5	0	5	5	0	5	3	2
Oct	4	4	0	4	4	0	4	3	1
Nov	4	4	0	4	4	0	4	3	1
Dec	5	5	0	5	5	0	5	0	5
TOTAL	52	52	0	52	52	0	52	35	12

#### Table 14 - POINT CLARK

		Total Coliform			E. Coli			HPC	
Month	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥44
Jan	4	4	0	4	4	0	4	1	3
Feb	4	4	0	4	4	0	4	3	1
Mar	5	5	0	5	5	0	5	3	2
Apr	4	4	0	4	4	0	4	4	0
May	4	4	0	4	4	0	4	4	0
Jun	5	5	0	5	5	0	5	4	1
Jul	4	4	0	4	4	0	4	4	0
Aug	4	4	0	4	4	0	4	2	2
Sep	5	5	0	5	5	0	5	3	2
Oct	4	4	0	4	4	0	4	4	0
Nov	4	4	0	4	4	0	4	3	1
Dec	5	5	0	5	5	0	5	0	5
TOTAL	52	52	0	52	52	0	52	35	12

# 5.2.3 Distribution Samples

Distribution samples are collected every week and tested for E. Coli, Total Coliform, and 25% of the samples are also analyzed for Heterotrophic Plate Count (HPC). Ontario Regulation 170/03 requires 8 distribution samples plus one additional sample for every 1,000 people served by the system. In 2020, a total of 364 distribution samples were collected and analyzed for TC and EC, which is above the required number of samples (n=168, based on 6,042 potential residents). A total of 207 distribution samples were analyzed for HPC (n=42, 25% of 168). Each TC and EC result from the distribution water was 0 cfu/100 mL. The range of HPC results were 0 - 10 cfu/100 mL. **Table 15** provides a summary of all microbiological samples taken in the distribution system.

		Total Coliform			E. Coli			HPC	
Month	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples 1 - 12
Jan	28	28	0	28	28	0	16	11	5
Feb	28	28	0	28	28	0	16	13	3
Mar	35	35	0	35	35	0	20	12	8
Apr	28	28	0	28	28	0	16	13	3
May	28	28	0	28	28	0	16	14	2
Jun	35	35	0	35	35	0	20	19	1
Jul	28	28	0	28	28	0	16	12	4
Aug	28	28	0	28	28	0	16	15	1
Sep	28	28	0	28	28	0	16	15	1
Oct	35	35	0	35	35	0	20	14	6
Nov	28	28	0	28	28	0	16	13	3
Dec	35	35	0	35	35	0	20	0	20
TOTAL	364	364	0	364	364	0	207	151	56

# Table 15 - Microbiological Results for Distribution System

# 5.3 Chemical Sampling and Testing as per Schedule 13, O. Reg. 170/03

# 5.3.1 Inorganics (Schedule 13, s. 13-2; Schedule 23)

Treated water samples are collected every 36 months and analyzed for inorganics. The most recent samples for the Lakeshore Drinking Water System were collected on June 4, 2018 and submitted to the laboratory for analysis of inorganics as listed in Schedule 23 (see **Table 16**). All parameters were found to be within compliance, however, the Arsenic level at Point Clark exceeded the Half-Maximum Allowable Concentration (half-MAC). Any half-MAC exceedance must be sampled on a quarterly basis to comply with O. Reg. 170/03, Schedule 13-5(1) - Increased frequency under s.s 13-2 and 13-4. Inorganics will be sampled and analyzed again in June 2021.

Parameter	Blairs Grove (µg/L)	Huronville South (µg/L)	Murdoch Glen (µg/L)	Point Clark (µg/L)	Maximum Allowable Concentration (µg/L)	Exceedance
Antimony	0.03	0.02 <mdl< th=""><th>0.02</th><th>0.03</th><th>6</th><th>No</th></mdl<>	0.02	0.03	6	No
Arsenic	0.4	0.4	1.6	5.6	10	No
Barium	4.65	24.6	27.1	26.3	1000	No
Boron	155	170	154	78	5000	No
Cadmium	0.004	0.003 <mdl< td=""><td>0.018</td><td>0.003<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<>	0.018	0.003 <mdl< td=""><td>5</td><td>No</td></mdl<>	5	No
Chromium	0.57	0.09	0.57	0.08	50	No
Mercury	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>1</td><td>No</td></mdl<>	1	No
Selenium	0.04 <mdl< td=""><td>0.04<mdl< td=""><td>0.04<mdl< td=""><td>0.04<mdl< td=""><td>50</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.04 <mdl< td=""><td>0.04<mdl< td=""><td>0.04<mdl< td=""><td>50</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.04 <mdl< td=""><td>0.04<mdl< td=""><td>50</td><td>No</td></mdl<></td></mdl<>	0.04 <mdl< td=""><td>50</td><td>No</td></mdl<>	50	No
Uranium	0.359	0.269	1.27	0.437	20	No

#### Table 16 -Inorganics (Schedule 13, s. 13-2; Schedule 23) Results

\*MDL = Laboratory Minimum Detection Limit

#### 5.3.2 Organics (Schedule 13, s. 13-4; Schedule 24)

Treated water samples are collected every 36 months and tested for Schedule 24 organic parameters. The most recent samples were collected on June 4, 2018. All parameters were found to be within compliance. Organics will be sampled and analyzed again in June 2021. Samples results can be found in **Table 17**.

Parameter	Blairs Grove (μg/L)	Huronville South (µg/L)	Murdoch Glen (µg/L)	Point Clark (µg/L)	Maximum Allowable Concentration (µg/L)	Exceedance
Benzene	0.32 <mdl< td=""><td>0.32<mdl< td=""><td>0.32<mdl< td=""><td>0.32<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.32 <mdl< td=""><td>0.32<mdl< td=""><td>0.32<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.32 <mdl< td=""><td>0.32<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<>	0.32 <mdl< td=""><td>1</td><td>No</td></mdl<>	1	No
Carbon Tetrachloride	0.16 <mdl< td=""><td>0.16<mdl< td=""><td>0.16<mdl< td=""><td>0.16<mdl< td=""><td>2</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.16 <mdl< td=""><td>0.16<mdl< td=""><td>0.16<mdl< td=""><td>2</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.16 <mdl< td=""><td>0.16<mdl< td=""><td>2</td><td>No</td></mdl<></td></mdl<>	0.16 <mdl< td=""><td>2</td><td>No</td></mdl<>	2	No
1,2-Dichlorobenzene	0.41 <mdl< td=""><td>0.41<mdl< td=""><td>0.41<mdl< td=""><td>0.41<mdl< td=""><td>200</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.41 <mdl< td=""><td>0.41<mdl< td=""><td>0.41<mdl< td=""><td>200</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.41 <mdl< td=""><td>0.41<mdl< td=""><td>200</td><td>No</td></mdl<></td></mdl<>	0.41 <mdl< td=""><td>200</td><td>No</td></mdl<>	200	No
1,4-Dichlorobenzene	0.36 <mdl< td=""><td>0.36<mdl< td=""><td>0.36<mdl< td=""><td>0.36<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.36 <mdl< td=""><td>0.36<mdl< td=""><td>0.36<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.36 <mdl< td=""><td>0.36<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<>	0.36 <mdl< td=""><td>5</td><td>No</td></mdl<>	5	No
1,1-Dichloroethylene	0.33 <mdl< td=""><td>0.33<mdl< td=""><td>0.33<mdl< td=""><td>0.33<mdl< td=""><td>14</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.33 <mdl< td=""><td>0.33<mdl< td=""><td>0.33<mdl< td=""><td>14</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.33 <mdl< td=""><td>0.33<mdl< td=""><td>14</td><td>No</td></mdl<></td></mdl<>	0.33 <mdl< td=""><td>14</td><td>No</td></mdl<>	14	No
1,2-Dichloroethane	0.35 <mdl< td=""><td>0.35<mdl< td=""><td>0.35<mdl< td=""><td>0.35<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.35 <mdl< td=""><td>0.35<mdl< td=""><td>0.35<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.35 <mdl< td=""><td>0.35<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<>	0.35 <mdl< td=""><td>5</td><td>No</td></mdl<>	5	No
Dichloromethane	0.35 <mdl< td=""><td>0.35<mdl< td=""><td>0.35<mdl< td=""><td>0.35<mdl< td=""><td>50</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.35 <mdl< td=""><td>0.35<mdl< td=""><td>0.35<mdl< td=""><td>50</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.35 <mdl< td=""><td>0.35<mdl< td=""><td>50</td><td>No</td></mdl<></td></mdl<>	0.35 <mdl< td=""><td>50</td><td>No</td></mdl<>	50	No
Monochlorobenzene	0.3 <mdl< td=""><td>0.3<mdl< td=""><td>0.3<mdl< td=""><td>0.3<mdl< td=""><td>80</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.3 <mdl< td=""><td>0.3<mdl< td=""><td>0.3<mdl< td=""><td>80</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.3 <mdl< td=""><td>0.3<mdl< td=""><td>80</td><td>No</td></mdl<></td></mdl<>	0.3 <mdl< td=""><td>80</td><td>No</td></mdl<>	80	No
Tetrachloroethylene	0.35MDL	0.35MDL	0.35MDL	0.35MDL	10	No
Trichloroethylene	0.44 <mdl< td=""><td>0.44<mdl< td=""><td>0.44<mdl< td=""><td>0.44<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.44 <mdl< td=""><td>0.44<mdl< td=""><td>0.44<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.44 <mdl< td=""><td>0.44<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<>	0.44 <mdl< td=""><td>5</td><td>No</td></mdl<>	5	No
Vinyl Chloride	0.17 <mdl< td=""><td>0.17<mdl< td=""><td>0.17<mdl< td=""><td>0.17<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.17 <mdl< td=""><td>0.17<mdl< td=""><td>0.17<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.17 <mdl< td=""><td>0.17<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<>	0.17 <mdl< td=""><td>1</td><td>No</td></mdl<>	1	No
Diquat	1 <mdl< td=""><td>1<mdl< td=""><td>1<mdl< td=""><td>1<mdl< td=""><td>70</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	1 <mdl< td=""><td>1<mdl< td=""><td>1<mdl< td=""><td>70</td><td>No</td></mdl<></td></mdl<></td></mdl<>	1 <mdl< td=""><td>1<mdl< td=""><td>70</td><td>No</td></mdl<></td></mdl<>	1 <mdl< td=""><td>70</td><td>No</td></mdl<>	70	No
Paraquat	1 <mdl< td=""><td>1<mdl< td=""><td>1<mdl< td=""><td>1<mdl< td=""><td>10</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	1 <mdl< td=""><td>1<mdl< td=""><td>1<mdl< td=""><td>10</td><td>No</td></mdl<></td></mdl<></td></mdl<>	1 <mdl< td=""><td>1<mdl< td=""><td>10</td><td>No</td></mdl<></td></mdl<>	1 <mdl< td=""><td>10</td><td>No</td></mdl<>	10	No
Glyphosate	1 <mdl< td=""><td>1<mdl< td=""><td>1<mdl< td=""><td>1<mdl< td=""><td>280</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	1 <mdl< td=""><td>1<mdl< td=""><td>1<mdl< td=""><td>280</td><td>No</td></mdl<></td></mdl<></td></mdl<>	1 <mdl< td=""><td>1<mdl< td=""><td>280</td><td>No</td></mdl<></td></mdl<>	1 <mdl< td=""><td>280</td><td>No</td></mdl<>	280	No
Polychlorinated Biphenyls	0.04 <mdl< td=""><td>0.04<mdl< td=""><td>0.04<mdl< td=""><td>0.04<mdl< td=""><td>3</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.04 <mdl< td=""><td>0.04<mdl< td=""><td>0.04<mdl< td=""><td>3</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.04 <mdl< td=""><td>0.04<mdl< td=""><td>3</td><td>No</td></mdl<></td></mdl<>	0.04 <mdl< td=""><td>3</td><td>No</td></mdl<>	3	No
Benzo(a)pyrene	0.004 <mdl< td=""><td>0.004<mdl< td=""><td>0.004<mdl< td=""><td>0.004<mdl< td=""><td>0.01</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.004 <mdl< td=""><td>0.004<mdl< td=""><td>0.004<mdl< td=""><td>0.01</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.004 <mdl< td=""><td>0.004<mdl< td=""><td>0.01</td><td>No</td></mdl<></td></mdl<>	0.004 <mdl< td=""><td>0.01</td><td>No</td></mdl<>	0.01	No

#### Table 17 Organics (Schedule 13, s. 13-4; Schedule 24) Results

\*MDL = Laboratory Minimum Detection Limit

Table 17 -	Organics (Schedule 13, s. 13-4; Schedule 24) Results - Continued
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Parameter	Blairs Grove (μg/L)	Huronville South (µg/L)	Murdoch Glen (µg/L)	Point Clark (μg/L)	Maximum Allowable Concentration (µg/L)	Exceedance
Alachlor	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>5</td><td>No</td></mdl<>	5	No
Atrazine+N-dealkylated metabolites	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>5</td><td>No</td></mdl<>	5	No
Atrazine	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td></td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td></td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td></td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td></td><td>No</td></mdl<>		No
Desethyl Atrazine	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td></td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td></td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td></td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td></td><td>No</td></mdl<>		No
Azinphos-methyl	0.05 <mdl< td=""><td>0.05<mdl< td=""><td>0.05<mdl< td=""><td>0.05<mdl< td=""><td>20</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.05 <mdl< td=""><td>0.05<mdl< td=""><td>0.05<mdl< td=""><td>20</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.05 <mdl< td=""><td>0.05<mdl< td=""><td>20</td><td>No</td></mdl<></td></mdl<>	0.05 <mdl< td=""><td>20</td><td>No</td></mdl<>	20	No
Carbaryl	0.05 <mdl< td=""><td>0.05<mdl< td=""><td>0.05<mdl< td=""><td>0.05<mdl< td=""><td>90</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.05 <mdl< td=""><td>0.05<mdl< td=""><td>0.05<mdl< td=""><td>90</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.05 <mdl< td=""><td>0.05<mdl< td=""><td>90</td><td>No</td></mdl<></td></mdl<>	0.05 <mdl< td=""><td>90</td><td>No</td></mdl<>	90	No
Carbofuran	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>90</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>90</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>90</td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>90</td><td>No</td></mdl<>	90	No
Chlorpyrifos	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>90</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>90</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>90</td><td>No</td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>90</td><td>No</td></mdl<>	90	No
Diazinon	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>20</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>20</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>20</td><td>No</td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>20</td><td>No</td></mdl<>	20	No
Dimethoate	0.03 <mdl< td=""><td>0.03<mdl< td=""><td>0.03<mdl< td=""><td>0.03<mdl< td=""><td>20</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.03 <mdl< td=""><td>0.03<mdl< td=""><td>0.03<mdl< td=""><td>20</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.03 <mdl< td=""><td>0.03<mdl< td=""><td>20</td><td>No</td></mdl<></td></mdl<>	0.03 <mdl< td=""><td>20</td><td>No</td></mdl<>	20	No
Diuron	0.03 <mdl< td=""><td>0.03<mdl< td=""><td>0.03<mdl< td=""><td>0.03<mdl< td=""><td>150</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.03 <mdl< td=""><td>0.03<mdl< td=""><td>0.03<mdl< td=""><td>150</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.03 <mdl< td=""><td>0.03<mdl< td=""><td>150</td><td>No</td></mdl<></td></mdl<>	0.03 <mdl< td=""><td>150</td><td>No</td></mdl<>	150	No
Malathion	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>190</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>190</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>190</td><td>No</td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>190</td><td>No</td></mdl<>	190	No
Metolachlor	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>50</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>50</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>50</td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>50</td><td>No</td></mdl<>	50	No
Metribuzin	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>80</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>80</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>80</td><td>No</td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>80</td><td>No</td></mdl<>	80	No
Phorate	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>2</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>2</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>2</td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>2</td><td>No</td></mdl<>	2	No
Prometryne	0.03 <mdl< td=""><td>0.03<mdl< td=""><td>0.03<mdl< td=""><td>0.03<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.03 <mdl< td=""><td>0.03<mdl< td=""><td>0.03<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.03 <mdl< td=""><td>0.03<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<>	0.03 <mdl< td=""><td>1</td><td>No</td></mdl<>	1	No
Simazine	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>10</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>10</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>10</td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>10</td><td>No</td></mdl<>	10	No
Terbufos	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>1</td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>1</td><td>No</td></mdl<>	1	No
Triallate	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>230</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>0.01<mdl< td=""><td>230</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>0.01<mdl< td=""><td>230</td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>230</td><td>No</td></mdl<>	230	No
Trifluralin	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>45</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>0.02<mdl< td=""><td>45</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02<mdl< td=""><td>45</td><td>No</td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>45</td><td>No</td></mdl<>	45	No
2,4-Dichlorophenoxyacetic acid	0.19 <mdl< td=""><td>0.19<mdl< td=""><td>0.19<mdl< td=""><td>0.19<mdl< td=""><td>100</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.19 <mdl< td=""><td>0.19<mdl< td=""><td>0.19<mdl< td=""><td>100</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.19 <mdl< td=""><td>0.19<mdl< td=""><td>100</td><td>No</td></mdl<></td></mdl<>	0.19 <mdl< td=""><td>100</td><td>No</td></mdl<>	100	No
Bromoxynil	0.33 <mdl< td=""><td>0.33<mdl< td=""><td>0.33<mdl< td=""><td>0.33<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.33 <mdl< td=""><td>0.33<mdl< td=""><td>0.33<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.33 <mdl< td=""><td>0.33<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<>	0.33 <mdl< td=""><td>5</td><td>No</td></mdl<>	5	No
Dicamba	0.20 <mdl< td=""><td>0.20<mdl< td=""><td>0.20<mdl< td=""><td>0.20<mdl< td=""><td>120</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.20 <mdl< td=""><td>0.20<mdl< td=""><td>0.20<mdl< td=""><td>120</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.20 <mdl< td=""><td>0.20<mdl< td=""><td>120</td><td>No</td></mdl<></td></mdl<>	0.20 <mdl< td=""><td>120</td><td>No</td></mdl<>	120	No
Diclofop-methyl	0.40 <mdl< td=""><td>0.40<mdl< td=""><td>0.40<mdl< td=""><td>0.40<mdl< td=""><td>9</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.40 <mdl< td=""><td>0.40<mdl< td=""><td>0.40<mdl< td=""><td>9</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.40 <mdl< td=""><td>0.40<mdl< td=""><td>9</td><td>No</td></mdl<></td></mdl<>	0.40 <mdl< td=""><td>9</td><td>No</td></mdl<>	9	No
МСРА	0.00012 <mdl< td=""><td>0.00012<mdl< td=""><td>0.00012<mdl< td=""><td>0.00012<mdl< td=""><td>0.1</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.00012 <mdl< td=""><td>0.00012<mdl< td=""><td>0.00012<mdl< td=""><td>0.1</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.00012 <mdl< td=""><td>0.00012<mdl< td=""><td>0.1</td><td>No</td></mdl<></td></mdl<>	0.00012 <mdl< td=""><td>0.1</td><td>No</td></mdl<>	0.1	No
Picloram	1 <mdl< td=""><td>1<mdl< td=""><td>1<mdl< td=""><td>1<mdl< td=""><td>190</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	1 <mdl< td=""><td>1<mdl< td=""><td>1<mdl< td=""><td>190</td><td>No</td></mdl<></td></mdl<></td></mdl<>	1 <mdl< td=""><td>1<mdl< td=""><td>190</td><td>No</td></mdl<></td></mdl<>	1 <mdl< td=""><td>190</td><td>No</td></mdl<>	190	No
2,4-Dichlorophenol	0.15 <mdl< td=""><td>0.15<mdl< td=""><td>0.15<mdl< td=""><td>0.15<mdl< td=""><td>900</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.15 <mdl< td=""><td>0.15<mdl< td=""><td>0.15<mdl< td=""><td>900</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.15 <mdl< td=""><td>0.15<mdl< td=""><td>900</td><td>No</td></mdl<></td></mdl<>	0.15 <mdl< td=""><td>900</td><td>No</td></mdl<>	900	No
2,4,6-Trichlorophenol	0.25 <mdl< td=""><td>0.25<mdl< td=""><td>0.25<mdl< td=""><td>0.25<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.25 <mdl< td=""><td>0.25<mdl< td=""><td>0.25<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.25 <mdl< td=""><td>0.25<mdl< td=""><td>5</td><td>No</td></mdl<></td></mdl<>	0.25 <mdl< td=""><td>5</td><td>No</td></mdl<>	5	No
2,3,4,6-Tetrachlorophenol	0.20 <mdl< td=""><td>0.20<mdl< td=""><td>0.20<mdl< td=""><td>0.20<mdl< td=""><td>100</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.20 <mdl< td=""><td>0.20<mdl< td=""><td>0.20<mdl< td=""><td>100</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.20 <mdl< td=""><td>0.20<mdl< td=""><td>100</td><td>No</td></mdl<></td></mdl<>	0.20 <mdl< td=""><td>100</td><td>No</td></mdl<>	100	No
Pentachlorophenol	0.15 <mdl< td=""><td>0.15<mdl< td=""><td>0.15<mdl< td=""><td>0.15<mdl< td=""><td>60</td><td>No</td></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.15 <mdl< td=""><td>0.15<mdl< td=""><td>0.15<mdl< td=""><td>60</td><td>No</td></mdl<></td></mdl<></td></mdl<>	0.15 <mdl< td=""><td>0.15<mdl< td=""><td>60</td><td>No</td></mdl<></td></mdl<>	0.15 <mdl< td=""><td>60</td><td>No</td></mdl<>	60	No

\*MDL = Laboratory Minimum Detection Limit

# 5.3.3 Trihalomethanes (Schedule 13, s. 13-6)

Distribution samples are taken every three months from representative points in the distribution system and tested for Trihalomethanes (THMs). In 2020, samples were collected during the months of February, May, August, and November. The Ontario Drinking Water Quality Standards (ODWQS) have set a Maximum Allowable Concentration (MAC) of 100  $\mu$ g/L for this parameter and it is expressed as a running annual average (RAA). Refer to **Tables 18, 19, 20, and 21** for the summary of Trihalomethane results and **Table 26** for the RAA.

# Trihalomethane (Schedule 13, s. 13-6) Results

#### Table 18 - BLAIRS GROVE

Month	THMs (μg/L)	Bromodichloro methane (µg/L)	Bromoform (µg/L)	Chloroform (µg/L)	Dibromochloro methane (µg/L)
Feb	9.8	3.3	<0.34	4.3	2.2
Мау	15.0	5.1	<0.34	6.8	3.2
Aug	15.0	5.2	<0.34	6.9	3.2
Nov	20.0	6.3	<0.34	11.0	3.1
RAA	15.0	5.0	<0.34	7.3	2.9
Maximum	20.0	6.3	<0.34	11.0	3.2
MAC (µg/L)	100				
Exceedance	No				

#### Table 19 - HURONVILLE SOUTH

Month	THMs (μg/L)	Bromodichloro methane (µg/L)	Bromoform (µg/L)	Chloroform (µg/L)	Dibromochloro methane (µg/L)
Feb	6.9	2.2	<0.34	3.0	1.7
Мау	6.3	1.9	<0.34	2.8	1.6
Aug	4.9	1.5	<0.34	2.4	0.99
Nov	6.6	2.0	<0.34	3.2	1.5
RAA	6.2	1.9	<0.34	2.9	1.4
Maximum	6.9	2.2	<0.34	3.2	1.7
MAC (µg/L)	100				
Exceedance	No				

# Table 20 - MURDOCH GLEN

Month	THMs (μg/L)	Bromodichloro methane (µg/L)	Bromoform (µg/L)	Chloroform (µg/L)	Dibromochloro methane (µg/L)
Feb	12.0	4.1	0.51	3.9	3.6
Мау	14.0	4.8	0.74	4.3	4.3
Aug	11.0	3.7	0.36	3.5	3.1
Nov	15.0	5.3	0.70	5.2	4.0
RAA	13.0	4.5	0.58	4.2	3.8
Maximum	15.0	5.3	0.74	5.2	4.3
MAC (µg/L)	100				
Exceedance	No				

# Trihalomethane (Schedule 13, s. 13-6) Results Continued

#### Table 21 - POINT CLARK

Month	THMs (μg/L)	Bromodichloro methane (µg/L)	Bromoform (µg/L)	Chloroform (µg/L)	Dibromochloro methane (µg/L)
Feb	8.0	2.8	<0.34	3.5	1.7
May	9.7	3.3	<0.34	4.0	2.4
Aug	11.0	3.5	<0.34	5.1	2.0
Nov	10.0	3.3	<0.34	4.9	1.9
RAA	9.7	3.2	<0.34	4.4	2.0
Maximum	11.0	3.5	<0.34	5.1	2.4
MAC (µg/L)	100				
Exceedance	No				

#### 5.3.4 Haloacetic Acids (Schedule 13, s. 13-6.1)

Ontario Regulation 170/03 has been amended to include quarterly testing for Haloacetic Acids (HAAs). Four (4) distribution samples are taken every three months from representative points in the distribution system and tested for Haloacetic Acids (HAAs). In 2020, samples were collected during the months of February, May, August, and November and results are expressed as a running annual average (RAA). Results are summarized in **Tables 22, 23, 24, and 25** and the RAA can be found in **Table 26**.

# Haloacetic Acid (Schedule 13, s. 13-6.1) Results

Month	Total HAAs (μg/L)	Bromoacetic acid (μg/L)	Chloroacetic acid (µg/L)	Dichloroacetic acid (µg/L)	Dibromoacetic acid (μg/L)	Trichloroacetic acid (μg/L)
Feb	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
May	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Aug	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Nov	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
RAA	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Max	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
MAC (µg/L)	80					
Exceedance	No					

# Table 22 - BLAIRS GROVE

# Haloacetic Acid (Schedule 13, s. 13-6.1) Results Continued

#### Table 23 - HURONVILLE SOUTH

Month	Total HAAs (μg/L)	Bromoacetic acid (μg/L)	Chloroacetic acid (μg/L)	Dichloroacetic acid (µg/L)	Dibromoacetic acid (µg/L)	Trichloroacetic acid (μg/L)
Feb	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
May	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Aug	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Nov	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
RAA	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Max	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
MAC (µg/L)	80					
Exceedance	No					

# Table 24 - MURDOCH GLEN

Month	Total HAAs (μg/L)	Bromoacetic acid (μg/L)	Chloroacetic acid (μg/L)	Dichloroacetic acid (µg/L)	Dibromoacetic acid (µg/L)	Trichloroacetic acid (μg/L)
Feb	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
May	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Aug	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Nov	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
RAA	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Max	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
MAC (µg/L)	80					
Exceedance	No					

## Table 25 - POINT CLARK

Month	Total HAAs (µg/L)	Bromoacetic acid (μg/L)	Chloroacetic acid (μg/L)	Dichloroacetic acid (µg/L)	Dibromoacetic acid (µg/L)	Trichloroacetic acid (μg/L)
Feb	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
May	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Aug	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Nov	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
RAA	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Max	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
MAC (µg/L)	80					
Exceedance	No					

Location	Sample Date	RAA - THMs (µg/L)	RAA - HAAs (µg/L)
	Feb	9.8	<5.3
BLAIRS GROVE	May	15.0	<5.3
BLAIKS GROVE	Aug	15.0	<5.3
	Nov	20.0	<5.3
	Feb	6.9	<5.3
HURONVILLE SOUTH	Мау	6.3	<5.3
HURONVILLE SOUTH	Aug	4.9	<5.3
	Nov	6.6	<5.3
	Feb	12.0	<5.3
MURDOCH GLEN	May	14.0	<5.3
MORDOCH GLEN	Aug	11.0	<5.3
	Nov	15.0	<5.3
	Feb	8.0	<5.3
POINT CLARK	May	6.3	<5.3
	Aug	4.9	<5.3
	Nov	10.0	<5.3
	RAA		<5.3
	MAC	100 (RAA)	80 (RAA)

#### Table 26 - THMs and HAAs - Rolling Annual Average Summary

# 5.3.5 Nitrate and Nitrite (Schedule 12, s. 13-7)

Four treated water samples are taken every three months and tested for nitrate and nitrite. In 2020, samples were collected during the months of February, May, August, and November. The Ontario Drinking Water Quality Standards (ODWQS) have set a Maximum Allowable Concentration (MAC) of 10 mg/L for nitrates and 1 mg/L for nitrites. The results were found to be within compliance. Refer to **Tables 27, 28, 29, and 30**.

# Nitrate and Nitrite (Schedule 13, s. 13-7) Results

#### Table 27 -BLAIRS GROVE

Month	Nitrite (mg/L)	Nitrate (mg/L)
Feb	<0.003	<0.006
Мау	<0.003	<0.006
Aug	<0.003	<0.006
Nov *2019	<0.003	<0.006
Average	<0.003	<0.006
Maximum	<0.003	<0.006
MAC	1	10
Exceedance	No	No

\*Note: Blairs Grove was off-line in November, so Nitrate and Nitrite samples could not be taken.

# Nitrate and Nitrite (Schedule 13, s. 13-7) Results Continued

# Table 28 - HURONVILLE SOUTH

Month	Nitrite (mg/L)	Nitrate (mg/L)
Feb	<0.003	<0.006
Мау	<0.003	<0.006
Aug	<0.003	<0.006
Nov	<0.003	<0.006
Average	<0.003	<0.006
Maximum	<0.003	<0.006
MAC	1	10
Exceedance	No	No

# Table 29 - MURDOCH GLEN

Month	Nitrite (mg/L)	Nitrate (mg/L)
Feb	<0.003	<0.006
Мау	<0.003	<0.006
Aug	<0.003	<0.006
Nov	<0.003	<0.006
Average	<0.003	<0.006
Maximum	<0.003	<0.006
MAC	1	10
Exceedance	No	No

# Table 30 - POINT CLARK

Month	Nitrite (mg/L)	Nitrate (mg/L)
Feb	<0.003	<0.006
Мау	<0.003	<0.006
Aug	<0.003	<0.006
Nov	<0.003	<0.006
Average	<0.003	<0.006
Maximum	<0.003	<0.006
MAC	1	10
Exceedance	No	No

# 5.3.6 Sodium (Schedule 13, s. 13-8)

One (1) water sample is collected from each of the four (4) Points of Entry (treated water) every 60 months and analyzed for Sodium. The *Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines, PIBS 4449e01, June 2006*, states: "The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets." These samples were collected on June 21, 2016. Three (3) of the samples exceeded 20 mg/L and were reported to the Grey Bruce Health Unit and the Ministry's Spills Action Centre (AWQI # 129989). Results can be found in **Table 31**. The next sampling date for Sodium will be on or before June 21, 2021.

# 5.3.7 Fluoride (Schedule 13, s. 13-9)

One (1) water sample is collected from each of the four (4) Points of Entry (treated water) every 60 months and analyzed for Fluoride. The Ontario Drinking Water Quality Standards (ODWQS) have set a Maximum Allowable Concentration (MAC) of 1.5 mg/L. On August 15, 2017, samples were collected for this analysis. All four samples exceeded the MAC due to naturally occurring fluoride in the aquifers. These exceedances were reported to the Grey Bruce Health Unit and the Ministry's Spills Action Centre (AWQI # 135640). The results are summarized in **Table 31**. The next sampling date for Fluoride will be on or before August 15, 2022.

	Sodium	Fluoride
Location	Result (mg/L)	Result (mg/L)
Blairs Grove	101	2.20
Huronville South	52.7	2.24
Murdoch Glen	68.4	2.14
Point Clark	19.8	2.20
MAC (mg/L)	20	1.50
Exceedance	Yes	Yes

# Table 31 -Sodium (Schedule 13, s. 13-8) and Fluoride (Schedule 13, s. 13-9) Results

# 5.3.8 Lead (Schedule 15.1) - (O. Reg. 170/03, s. 11 (6) (g)

Schedule 15.1 of Ontario Regulation 170/03 requires that samples be taken during two seasons: once between December 15 and April 15, and once between June 15 and October 15. In 2020, the Lakeshore Drinking Water System was sampled for lead, pH and alkalinity. Three (3) samples were collected on January 27, 2020 and three (3) were collected on July 13, 2020. The next sampling seasons are reduced, with only pH and alkalinity parameters required between December 2020 and April 2021, and again between June and October 2021. Results for 2020 can be found in **Table 32**.

# Table 32 Lead Sampling Program (Schedule 15.1) Results

Season	Alkalinity (mg/L)	рН	Lead (mg/L)
	163	7.83	0.08
Dec-Apr	176	7.79	0.12
-	183	7.58	0.34
	158	7.39	0.06
Jun-Oct	173	7.33	0.52
	181	7.16	0.29
MAC (µg/L)			10
Exceedance			No

# 5.3.9 Non-Regulatory Testing - Aesthetic Objectives and Operational Guidelines (AO/OG)

Samples were collected from each of the four (4) Points of Entry (treated water) on November 21, 2016 and tested for parameters listed in the *MOECC Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines, June 2006, PIBS 4449e01.* These results are included in **Table 33** for information purposes.

# Table 33 Aesthetic Objectives and Operational Guideline Results

Parameter	AO/OG	Blairs Grove	Huronville South	Murdoch Glen	Point Clark
рН	6.5 - 8.5	7.89	8.10	8.17	8.07
Alkalinity (mg/L as CaCO₃)	30 - 500	174	156	171	190
Conductivity (μS/cm)		1,720	694	771	709
Colour (TCU)	5	3 <mdl< td=""><td>3 <mdl< td=""><td>3 <mdl< td=""><td>7</td></mdl<></td></mdl<></td></mdl<>	3 <mdl< td=""><td>3 <mdl< td=""><td>7</td></mdl<></td></mdl<>	3 <mdl< td=""><td>7</td></mdl<>	7
Total Dissolved Solids (mg/L)	500	1,350	494	511	534
Organic Nitrogen (mg/L)	0.15	0.05 <mdl< td=""><td>0.05 <mdl< td=""><td>0.05 <mdl< td=""><td>0.05 <mdl< td=""></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.05 <mdl< td=""><td>0.05 <mdl< td=""><td>0.05 <mdl< td=""></mdl<></td></mdl<></td></mdl<>	0.05 <mdl< td=""><td>0.05 <mdl< td=""></mdl<></td></mdl<>	0.05 <mdl< td=""></mdl<>
Total Kjeldahl Nitrogen (mg/L)		0.05 <mdl< td=""><td>0.07</td><td>0.05 <mdl< td=""><td>0.05 <mdl< td=""></mdl<></td></mdl<></td></mdl<>	0.07	0.05 <mdl< td=""><td>0.05 <mdl< td=""></mdl<></td></mdl<>	0.05 <mdl< td=""></mdl<>
Ammonia + Ammonium (mg/L)		0.04 <mdl< td=""><td>0.04</td><td>0.07</td><td>0.05</td></mdl<>	0.04	0.07	0.05
Hydrogen Sulphide (mg/L)	0.05	<0.006	<0.006	<0.006	<0.006
Sulphide (mg/L)	0.05	0.006 <mdl< td=""><td>0.006 <mdl< td=""><td>0.006 <mdl< td=""><td>0.006 <mdl< td=""></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.006 <mdl< td=""><td>0.006 <mdl< td=""><td>0.006 <mdl< td=""></mdl<></td></mdl<></td></mdl<>	0.006 <mdl< td=""><td>0.006 <mdl< td=""></mdl<></td></mdl<>	0.006 <mdl< td=""></mdl<>
Chloride (mg/L)	250	150	18	37	13
Sulphate (mg/L)	500	620	170	170	170
Hardness (mg/L as CaCO₃)	80 - 100	765	237	246	308
Aluminum (μg/L)	100	25.5	1.0	2.8	3.3
Copper (µg/L)	1000	0.08	0.12	5.80	0.22
Iron (μg/L)	300	581	150	102	311
Manganese (µg/L)	50	3.70	2.02	3.07	4.11
Zinc (µg/L)	5000	2	4	20	4
Dissolved Organic Carbon (mg/L)	5	1 <mdl< td=""><td>1 <mdl< td=""><td>1 <mdl< td=""><td>1 <mdl< td=""></mdl<></td></mdl<></td></mdl<></td></mdl<>	1 <mdl< td=""><td>1 <mdl< td=""><td>1 <mdl< td=""></mdl<></td></mdl<></td></mdl<>	1 <mdl< td=""><td>1 <mdl< td=""></mdl<></td></mdl<>	1 <mdl< td=""></mdl<>
Methane (L/m <sup>3</sup> )	3	0.02 <mdl< td=""><td>0.02 <mdl< td=""><td>0.02 <mdl< td=""><td>0.02 <mdl< td=""></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02 <mdl< td=""><td>0.02 <mdl< td=""></mdl<></td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>0.02 <mdl< td=""></mdl<></td></mdl<>	0.02 <mdl< td=""></mdl<>
Ethylbenzene (µg/L)	2.4	0.33 <mdl< td=""><td>0.33 <mdl< td=""><td>0.33 <mdl< td=""><td>0.33 <mdl< td=""></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.33 <mdl< td=""><td>0.33 <mdl< td=""><td>0.33 <mdl< td=""></mdl<></td></mdl<></td></mdl<>	0.33 <mdl< td=""><td>0.33 <mdl< td=""></mdl<></td></mdl<>	0.33 <mdl< td=""></mdl<>
Toluene (µg/L)	24	0.36 <mdl< td=""><td>0.36 <mdl< td=""><td>0.36 <mdl< td=""><td>0.36 <mdl< td=""></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.36 <mdl< td=""><td>0.36 <mdl< td=""><td>0.36 <mdl< td=""></mdl<></td></mdl<></td></mdl<>	0.36 <mdl< td=""><td>0.36 <mdl< td=""></mdl<></td></mdl<>	0.36 <mdl< td=""></mdl<>
Xylene (µg/L)	300	0.43 <mdl< td=""><td>0.43 <mdl< td=""><td>0.43 <mdl< td=""><td>0.43 <mdl< td=""></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.43 <mdl< td=""><td>0.43 <mdl< td=""><td>0.43 <mdl< td=""></mdl<></td></mdl<></td></mdl<>	0.43 <mdl< td=""><td>0.43 <mdl< td=""></mdl<></td></mdl<>	0.43 <mdl< td=""></mdl<>
m/p-xylene (µg/L)		0.43 <mdl< td=""><td>0.43 <mdl< td=""><td>0.43 <mdl< td=""><td>0.43 <mdl< td=""></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.43 <mdl< td=""><td>0.43 <mdl< td=""><td>0.43 <mdl< td=""></mdl<></td></mdl<></td></mdl<>	0.43 <mdl< td=""><td>0.43 <mdl< td=""></mdl<></td></mdl<>	0.43 <mdl< td=""></mdl<>
o-xylene (μg/L)		0.17 <mdl< td=""><td>0.17 <mdl< td=""><td>0.17 <mdl< td=""><td>0.17 <mdl< td=""></mdl<></td></mdl<></td></mdl<></td></mdl<>	0.17 <mdl< td=""><td>0.17 <mdl< td=""><td>0.17 <mdl< td=""></mdl<></td></mdl<></td></mdl<>	0.17 <mdl< td=""><td>0.17 <mdl< td=""></mdl<></td></mdl<>	0.17 <mdl< td=""></mdl<>

\*MDL = Laboratory Minimum Detection Limit

# 6.0 WATER AND CHEMICAL USE (O. Reg. 170/03, s. 11 (6) (a); Schedule 22-2 (3))

# 6.1 Chemical Usage (O. Reg. 170/03, s. 11 (6) (a))

In 2020, the total amount of 12% sodium hypochlorite (NaOCl) used to treat the water supplied by the five wells in the Lakeshore Drinking Water System is tabulated in **Table 34** with the average chlorine dosage. During the same period, the total amount of undiluted sodium silicate (Na<sub>2</sub>SiO<sub>3</sub>) for iron sequestering is tabulated in **Table 35** with the average silicate dosage.

	BLAIRS GROVE		HURONVII	LE SOUTH	MURDOCH GLEN		POINT	CLARK
Month	Usage (kg)	Average Dosage (mg/L)	Usage (kg)	Average Dosage (mg/L)	Usage (kg)	Average Dosage (mg/L)	Usage (kg)	Average Dosage (mg/L)
Jan	3.08	5.17	36.72	3.28	11.35	3.64	95.31	3.13
Feb	5.89	4.09	23.27	3.12	7.99	3.33	83.96	2.97
Mar	3.78	4.58	27.89	3.17	8.69	3.51	106.80	3.07
Apr	6.45	3.96	31.54	3.20	7.01	3.63	102.74	3.11
May	20.88	3.93	62.09	3.35	9.11	3.35	124.74	3.00
Jun	25.51	2.61	109.89	3.39	17.24	3.66	142.12	3.00
Jul	97.83	3.70	143.94	3.36	42.75	3.52	160.62	3.06
Aug	30.55	4.11	98.95	3.23	23.41	3.63	164.27	3.29
Sep	0	0	72.04	3.41	15.42	4.22	133.29	3.06
Oct	0	0	44.15	3.38	12.47	3.78	120.26	3.15
Nov	0	0	31.26	3.38	8.41	3.82	125.72	3.19
Dec	0	0	33.78	3.40	7.01	3.59	112.97	3.13
TOTAL	193.98		715.52		170.86		1,472.80	
Average		4.02		3.30		3.64		3.10

# Table 34 Sodium Hypochlorite Usage

Sodium Hypochlorite Grand Total Usage:	2,553.15 kg
Sodium Hypochlorite Average Dosage:	3.52 mg/L

Table 35 -	Sodium Silicate Usage
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	BLAIRS	GROVE	HURONVILLE SOUTH		MURDOCH GLEN		POINT CLARK	
Month	Usage (kg)	Average Dosage (mg/L)	Usage (kg)	Average Dosage (mg/L)	Usage (kg)	Average Dosage (mg/L)	Usage (kg)	Average Dosage (mg/L)
Jan	2.79	4.68	25.52	2.28	15.15	4.86	79.74	2.62
Feb	8.37	5.81	18.74	2.51	11.16	4.65	67.78	2.40
Mar	3.99	4.83	19.14	2.17	11.56	4.67	81.73	2.35
Apr	9.17	5.64	22.72	2.30	8.77	4.54	77.34	2.34
May	25.91	4.88	35.48	1.92	12.36	4.55	97.68	2.35
Jun	51.03	5.22	83.72	2.58	21.53	4.57	116.81	2.47
Jul	140.34	5.31	94.49	2.20	59.80	4.92	124.39	2.37
Aug	40.67	5.48	76.15	2.48	31.10	4.83	126.38	2.53
Sep	0	0	51.03	2.41	17.94	4.91	112.03	2.58
Oct	0	0	32.29	2.47	15.95	4.83	89.31	2.34
Nov	0	0	26.31	2.84	10.37	4.70	93.69	2.38
Dec	0	0	23.12	2.32	9.57	4.90	83.72	2.32
TOTAL	282.27		508.72		225.26		1,150.60	
Average		5.23		2.38		4.74		2.42

Sodium Silicate Grand Total Usage:	2,166.85 kg
Sodium Silicate Average Dosage:	3.69 mg/L

# 6.2 Summary of Flow Rates, Annual Volumes and Capacities (O. Reg. 170/03, Schedule 22-2 (3))

A summary of the water supplied to the distribution system in 2020 from each well supply is provided in **Tables 36**, **37**, **38**, **and 39**. The volumes reported for each well supply are taken from the SCADA continuous monitoring system. The flow meters were calibrated on the following dates:

Blairs Grove:	Raw water flow meter	June 30, 2020
Huronville South:	Treated water flow meter	June 30, 2020
Murdoch Glen:	Raw water flow meter	June 30, 2020
Murdoch Glen:	Treated water flow meter - Zone 2	June 30, 2020
Murdoch Glen:	Treated water flow meter - Zone 3	June 30, 2020
Point Clark:	Raw water flow meter	June 30, 2020

**NOTE:** The company that performed the annual verifications did not follow the manufacturer's instructions for testing at three different flow rates within the operating range of the meter, but rather they measured the operational flow using a magnetic clamp-on device. This was identified as a Non-Compliance during the MECP Drinking Water Inspection. When contacted, the Flow Meter Manufacturer (Sensus) did not have a procedure for verifying the mechanical flow meters used at the Ripley Pumphouse, as it is deemed obsolete. Due to the COVID-19 Pandemic, we were unable to arrange for another flow meter company to perform the retest of the meter verifications. This testing will be conducted in 2021 as COVID restrictions are lifted.

# Flow Rates, Annual Volumes, and Capacities

# Table 36 - BLAIRS GROVE

Month	Raw Flow Daily Max (L/s)	Raw Flow Monthly Avg (L/s)	Raw Volume Monthly Total (m <sup>3</sup> )	Raw Volume Daily Max (m³)	Raw Volume Monthly Avg (m³)	Capacity Monthly Max (%)
Jan	30.03	25.04	603.03	237.76	19.50	9.07%
Feb	29.90	23.93	1,453.12	562.76	50.15	21.47%
Mar	29.73	27.33	117.68	23.54	3.83	0.90%
Apr	29.70	27.27	1,615.75	463.92	53.86	17.70%
May	29.95	26.89	5,347.55	703.95	172.50	26.86%
Jun	29.16	26.55	10,633.15	1,155.62	354.44	44.09%
Jul	30.88	25.87	26,364.79	1,702.35	850.48	64.95%
Aug	29.66	25.44	6,910.14	655.30	222.91	25.00%
Sep	0.00	0.00	0.00	0.00	0.00	0.00%
Oct	0.00	0.00	0.00	0.00	0.00	0.00%
Nov	0.00	0.00	0.00	0.00	0.00	0.00%
Dec	0.00	0.00	0.00	0.00	0.00	0.00%
PTTW Max	30.33	30.33	79,722.08	2,621.00		
Annual Max	30.88		26,364.79	1,702.35		64.95%
Annual Avg		26.04	4,420.43		143.97	5.53%
Annual Total			53,045.21			

\*Note: Blairs Grove was taken off-line on August 24, 2020.

# Table 37 -HURONVILLE SOUTH

Month	Raw Flow Daily Max (L/s)	Raw Flow Monthly Avg (L/s)	Raw Volume Monthly Total (m <sup>3</sup> )	Raw Volume Daily Max (m³)	Raw Volume Monthly Avg (m³)	Capacity Monthly Max (%)
Jan	16.99	2.53	6,773.06	566.35	218.49	14.42%
Feb	7.04	1.65	4,100.73	228.55	141.40	5.82%
Mar	12.07	1.87	5,010.45	212.39	161.63	5.41%
Apr	8.15	2.37	6,149.59	275.28	204.99	7.01%
May	18.29	5.10	13,644.30	900.71	440.14	22.93%
Jun	19.99	9.63	24,943.91	1,089.23	831.46	27.73%
Jul	18.91	12.43	32,774.26	1,298.66	1,057.23	33.06%
Aug	18.89	8.58	22,970.97	1,003.88	741.00	25.56%
Sep	18.50	6.06	15,606.98	648.01	520.23	16.50%
Oct	22.26	3.46	9,055.75	393.23	292.12	10.01%
Nov	14.30	2.22	5,711.49	313.94	190.38	7.99%
Dec	20.31	2.23	5,964.72	221.10	192.41	5.63%
PTTW Max	45.47	45.47	119,468.76	3,927.74		
Annual Max	22.26		32,774.26	1,298.66		33.06%
Annual Avg		4.84	12,725.52		415.96	10.62%
Annual Total			152,706.21			

# Flow Rates, Annual Volumes and Capacities Continued

# Table 38 - MURDOCH GLEN

Month	Raw Flow Daily Max (L/s)	Raw Flow Monthly Avg (L/s)	Raw Volume Monthly Total (m <sup>3</sup> )	Raw Volume Daily Max (m³)	Raw Volume Monthly Avg (m³)	Capacity Monthly Max (%)
Jan	20.01	17.90	3,135.98	507.64	101.16	27.98%
Feb	20.09	18.73	2,434.66	145.27	83.95	8.01%
Mar	20.00	18.67	2,414.39	123.49	77.88	6.81%
Apr	19.76	18.66	1,993.98	126.70	66.47	6.98%
Мау	21.00	18.71	2,872.77	360.77	92.67	19.88%
Jun	19.86	18.21	4,854.85	351.74	161.83	19.39%
Jul	19.67	17.80	12,156.39	730.17	392.14	40.24%
Aug	19.40	17.73	6,427.06	396.04	207.32	21.83%
Sep	19.66	17.50	3,645.22	222.45	121.51	12.26%
Oct	19.94	17.70	3,317.20	286.52	107.01	15.79%
Nov	18.96	17.74	2,152.50	137.30	71.75	7.57%
Dec	19.17	17.79	1,961.94	132.54	63.29	7.30%
PTTW Max	21.00	21.00	55,188.00	1,814.40		
Annual Max	21.00		12,156.39	730.17		40.24%
Annual Avg		18.10	3,947.25		128.92	7.13%
Annual Total			47,366.94			

# Table 39 - POINT CLARK

Month	Raw Flow Daily Max (L/s)	Raw Flow Monthly Avg (L/s)	Raw Volume Monthly Total (m³)	Raw Volume Daily Max (m³)	Raw Volume Monthly Avg (m³)	Capacity Monthly Max (%)
Jan	31.99	28.42	28,299.55	1,079.82	912.89	32.99%
Feb	34.69	18.29	27,079.84	1,183.81	833.79	36.17%
Mar	33.16	17.11	32,835.88	1,434.57	1,059.22	43.83%
Apr	32.58	18.59	31,219.75	1,221.62	1,040.66	37.32%
May	32.10	19.62	39,946.29	1,466.75	1,288.59	44.81%
Jun	20.82	19.53	44,160.93	1,639.68	1,472.03	50.10%
Jul	22.73	20.31	49,696.70	1,672.24	1,603.12	51.09%
Aug	22.39	19.98	47,480.73	1,696.28	1,531.64	51.82%
Sep	30.69	19.90	40,818.93	1,673.18	1,360.63	51.12%
Oct	30.69	19.89	36,737.97	1,481.65	1,185.10	45.27%
Nov	21.82	20.03	36,751.94	1,709.37	1,225.06	52.22%
Dec	22.19	20.00	34,379.64	1,313.42	1,109.02	40.13%
PTTW Max	37.88	37.88	99,557.40	3,273.12		
Annual Max	34.69		49,696.70	1,709.37		52.22%
Annual Avg		20.14	37,450.68		1,226.81	37.51%
Annual Total			449,408.15			

# 6.3 System Capacity (O. Reg. 170/03, Schedule 22-2 (3) Continued)

The following is a comparison of the annual volumes to the rated capacity and flow rates approved in the systems' PTTW, DWWP and MDWL. The total system capacity represents the percentage capacity of the sum of all the water produced in relation to the total system volume permitted. A summary of the totals for all the well supplies is presented in **Table 40**. The visual representations of each well and the Lakeshore total capacity are presented in Figures 2 through 6.

# Table 40 - Total Volumes of All Well Supplies

Location (Well Supply)	Total Volume for 2020 (m <sup>3</sup> )
Blairs Grove	53,045.21
Huronville South	152,706.21
Murdoch Glen	47,366.94
Point Clark	449,408.15
Total Rated Capacity, PTTW (m <sup>3</sup> )	4,247,234.90
Grand Total (all well supplies), Actual (m <sup>3</sup> )	702,526.51
Overall Operating Capacity, Actual %	16.50%

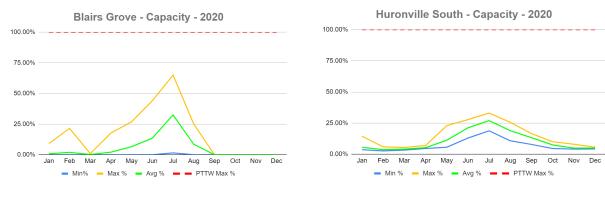


Figure 2



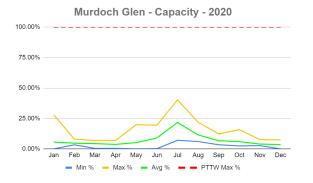




Figure 4



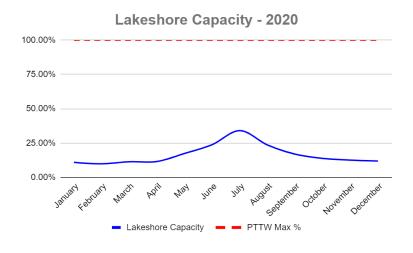


Figure 6

# 7.0 IMPROVEMENTS TO SYSTEM AND ROUTINE AND PREVENTATIVE MAINTENANCE (s. 11 (6) (e))

The following summarizes water system improvements and routine and preventative maintenance for the Lakeshore Drinking Water System Supply:

# All Sites:

Routine and preventative maintenance performed as per Jobs Plus schedule. Flow meter calibrations completed. Georgian Bay Fire and Safety inspections completed. Semi-annual flushing and annual valve turning completed. Backflow preventer testing completed.

# **Blairs Grove:**

February:	Repair to thermostat for building heater.
	Installation of safety screen on HLP.
	Installation of new air relief valve at wellhead.
April:	Installation of protective screen over exhaust fan.
August:	Issues with flow and chlorine, which was identified as well casing failure. Well off-line.
	Hopper installed a temporary pump and performed flow test on monitoring well.
September:	Hopper performing extensive flow test on monitoring well.

# Huronville South:

January:	Repaired chlorine analyzer bypass line.
	Repaired and tested autodialer alarms.
February:	Replaced chlorine alarm relay.
July:	Replaced well pump contactor.
September:	High lift pump 2 overload was tripped due to a power interruption.

# Murdoch Glen:

January:	New tubing on chlorine analyzer.
March:	Repaired cracks in concrete near diesel generator.
May:	Flow meter signal error; wiring issue (May 22-26); connection repaired (MECP notified).
June:	Control valve # 6 (CV6) diaphragm leaking; valve isolated.
	Replaced leaking Tee on chlorine board.
July:	Diaphragm replaced on CV6.

# Point Clark:

January:	Replaced chlorine analyzer.
February:	Well pump # 2 burned out; well pump motor was replaced.
	Well pump failed again and was taken offline.
	Well pump was pulled, and pump was replaced.
March:	Hydro monitoring equipment was installed.
April:	Hydro monitoring equipment was removed.
	Replaced chlorine flow sensor.
June:	Tee was replaced on WP 3 chlorine board.
	Hydro issues; Sepoy Electric onsite for troubleshooting.
August:	Hydro One onsite for meter base replacement.
September:	Extended power outage tripped out HLPs and WPs.
	Hydro meter was hit by lawnmower; Sepoy Electric onsite to make repairs to meter.
	HLPs and WPs faulted; SCADA server was offline; Eramosa rebooted server.

# 8.0 MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS INSPECTIONS AND REGULATORY ISSUES (Schedule 22-2 (2))

- MECP Drinking Water Inspection was conducted on October 28, 2020 and awarded a rating of 98.80% (previous rating was 98.27%).
- A list of Capital Items for 2021 was submitted to the Township of Huron-Kinloss on November 1, 2020.
- DWQMS Management Review was conducted on June 3, 2020.
- DWQMS Internal Audit was conducted between May 8 11, 2020.
- DWQMS External Audit (off-site) was conducted on May 26, 2020.
- DWQMS Complete Risk Assessment was conducted on October 29, 2020.
- Emergency Response Exercise was not required in 2020 due to the State of Emergency declaration regarding the COVID-19 Pandemic.

# 9.0 **REGULATORY CHANGES**

Changes to Ontario Regulation 170/03 and Ontario Regulation 169/03 that strengthen standards and clarify testing requirements, new sampling and testing parameters, reporting and resampling requirements, and the removal of the 13 pesticides came into effect January 1, 2016. Updates to the standards and reporting requirements for Arsenic came into effect January 1, 2018. In 2020,, the following amendment was added:

• Effective January 1, 2020, a standard for HAAs is introduced. The standard is 0.08 mg/L (80 μg/L) and must be expressed as a Running Annual Average (RAA).

# 9.1 Arsenic Sampling

In January 2018, O. Reg. 169/03 - Ontario Drinking Water Quality Standard for Arsenic was changed to 0.010 mg/L from 0.025 mg/L, making the new Half-MAC (Maximum Allowable Concentration) 0.005 mg/L. Point Clark is the only Lakeshore well supply that has an Arsenic level in exceedance of the Half-MAC and therefore must be sampled on a quarterly basis to satisfy O. Reg. 170/03, Schedule 13-5(1) - Increased frequency under s.s 13-2 and 13-4. See **Table 41** for Point Clark Arsenic results.

# Table 41 -Arsenic Results

Sample Date	Arsenic Concentration (µg/L)
Feb 10, 2020	5.9
May 11, 2020	5.6
Aug 10, 2020	4.9
Nov 16, 2020	4.7
MAC (µg/L)	10
Exceedance	No

# NOTE:

# O. Reg. 170/03, Schedule 13: Increased frequency under s.s 13-2 and 13-4

13-5. (1) If a test result obtained under section 13-2 or 13-4 for a parameter **exceeds half of the standard prescribed** for the parameter in Schedule 2 to the Ontario Water Quality Standards, the frequency of sampling and testing for that parameter under that section shall be **increased** so that at least one sample is taken and tested **every three months.** 

# 10.0 WELL LEVELS (PTTW)

Each of the four sub-systems have a Permit To Take Water (PTTW), which dictates the capacity that each well is permitted to supply, as well as specific monitoring parameters. In addition to flow, static well levels are taken on a monthly basis to monitor the performance of the aquifer. **Table 42** provides a summary of the static well levels recorded in 2020. It should be noted that four (4) of the wells have static levels that are below grade. One of the wells, Blairs Grove, is a flowing artesian well that has a well level that is above grade and the well level is a calculation based on its corresponding pressure reading.

Month	Blairs Grove (above grade, m)	Huronville South (m)	Murdoch Glen (m)	Point Clark Well 2 (m)	Point Clark Well 3 (m)
Jan	2.64	10.05	8.85	4.27	7.31
Feb	2.46	9.75	8.20	4.27	7.31
Mar	2.46	9.75	8.10	4.57	7.65
Apr	2.64	9.75	8.10	4.26	7.31
May	2.46	9.75	8.40	4.26	7.31
Jun	2.20	10.05	9.15	3.96	7.01
Jul	1.97	10.05	9.95	4.26	7.31
Aug	1.41	10.05	9.87	4.87	7.92
Sep	Well casing failure	10.05	9.85	5.18	8.23
Oct	Well casing failure	10.05	9.57	5.48	8.53
Nov	Well casing failure	10.97	9.54	3.96	7.01
Dec	Well casing failure	10.66	9.10	4.26	7.31
Min	1.41	9.75	8.10	3.96	7.01
Max	2.64	10.97	9.95	5.48	8.53
Avg	2.27	10.08	9.06	4.47	7.52

# Table 42 - Static Well Levels (PTTW)

# **11.0** SOURCE WATER PROTECTION (*Clean Water Act, 2006*)

A Drinking Water Source Protection Assessment (DWSPA) Report was generated for the Saugeen Valley Source Protection Area by the Conservation Authority Source Protection Office. This report identifies vulnerable areas, recharge areas, and potential threats to help protect existing and future sources of drinking water from contamination and overuse. This report can be found on-line at:

http://home.waterprotection.ca/source-protection-plan/assessment-reports/saugeen-valley/

The Well Head Protection Areas (WHPAs) within the Lakeshore Drinking Water System have 4 designations:

- WHPA-A: 100 m radius around the well head
- WHPA-B: 2-year time-of-travel capture zone
- WHPA-C: 5-year time-of-travel capture zone

WHPA-D: 25-year time-of-travel capture zone

The Lakeshore wells are NOT classified as groundwater under direct influence of surface water (GUDI).

The DWSPA report states: "The WHPAs within the Township of Huron-Kinloss vary significantly in their vulnerability to contamination. A large percentage of the total area within the Blairs Grove, Murdoch Glen and Point Clark WHPAs has a low intrinsic vulnerability to contamination. Blairs Grove and Point Clark have low vulnerability in over 94% of their area. Huronville South has a slightly higher vulnerability to contamination and a larger portion of moderate vulnerability." **Table 43** shows a summary of significant drinking water threats within the Lakeshore Drinking Water System.

WHPA A-D	Number of "are or would be significant" threats				Number of properties with "are or would be significant" threats			
	Chemical	DNAPL	Pathogen	Total	Agricultural	Residential	Others	Total
Blairs Grove	32	0	22	54	0	22	0	22
Huronville South	84*	0	2*	86	0	82	2**	84
Murdoch Glen	12	4	10	26	1	10	0	11
Point Clark	22	4	15	41	0	14	1	15

# Table 43 - Lakeshore WHPA: Summary of Significant Drinking Water Threats

\* One threat of the stated threat count is found in the Municipality of Kincardine.

\*\* One property of the stated property count is found in the Municipality of Kincardine.

In conclusion, as stated in the DWSPA Report: "Based on available data and knowledge on raw water quality, no drinking water quality issues were identified for this water system that would result from ongoing or past activities. Also, no conditions resulting from past activities were identified within the WHPA."

# **12.0 OBSERVATIONS AND HISTORICAL TRENDS**

# Raw Water Quality

• Microbiological: There were no positive microbiological test results in 2020.

Table 44 -10-Year Historical Results:

Year	Well Source	Positive microbiological Result
2013	Point Clark Well # 2	1 Total Coliform
2015	Huronville South	4 Total Coliforms
2015	Point Clark Well # 2	1 Total Coliform
2017	Huronville South	1 Total Coliform
2018	Blairs Grove	1 Total Coliform

Due to the infrequent historical results, there are no concerns at this time.

• Chemical Parameters: There were no exceedances for any of the chemical parameters tested in 2020. Sodium and Fluoride are tested every 60 months and were not required in 2020. These parameters will be sampled again in 2021.

Veer	Blairs Grove		Huronville South		Murdoch Glen		Point Clark	
Year	Sodium	Fluoride	Sodium	Fluoride	Sodium	Fluoride	Sodium	Fluoride
2006	98.0	2.01	43.9	2.07	43.7	2.06	17.9	2.12
2011	86.4	1.83	46.6	2.32	49.7	2.15	16.0	2.22
2016	101.0	1.71	52.7	2.19	68.4	2.12	19.8	2.04

# <u>Arsenic: Point Clark</u>

Arsenic is being monitored at Point Clark quarterly, since it is just above half of the maximum allowable concentration (MAC).

Year	Arsenic (µg/L)
2008	5.2
2009	6.7
2010	5.6, 5.6
2011	5.5, 5.7
2012	5.2, 5.8
2013	5.5, 5.1
2014	5.9, 6.0
2015	5.5

### Table 46 -10-Year Historical Results:



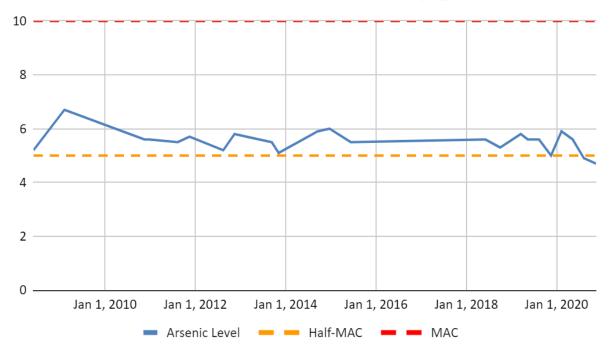


Figure 7

• Raw Turbidity:

Table 47 - 10-Year Historical Result
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Well Source	10-Year Historical Average (2010 to 2019) (NTU)	2020 Average (NTU)	Comments
Blairs Grove	0.53	0.87	Blairs Grove Well 2 had a casing failure in August. The monitoring well was tested and will be equipped as the production well in 2021.
Huronville South	0.27	0.19	The raw turbidity has remained consistent based on the 10-year historical average. There is no concern at this time.
Murdoch Glen	0.24	0.27	The raw turbidity has remained consistent based on the 10-year historical average. There is no concern at this time.
Point Clark Well # 2	0.22	0.30	The raw turbidity is slightly elevated from the 10-year historical average, but is still relatively low There is no concern at this time.
Point Clark Well # 3	0.22	0.25	The raw turbidity has remained consistent based on the 10-year historical average. There is no concern at this time. (PC 3 was new in 2015).

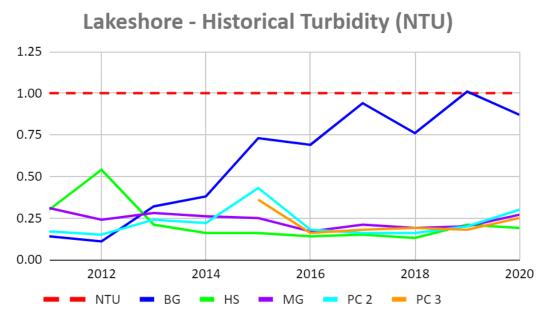


Figure 8

• Well Levels:

Table 48 -10-Year Historical Results:

Well Source	10-Year Historical Average (2010 to 2019) (m)	2020 Average (m)	Comments
Blairs Grove	3.45 m above grade	2.28 m above grade	Blairs Grove Well 2 had a casing failure in August. The monitoring well was tested and will be equipped as the production well in 2021.
Huronville South	10.78 m below grade	10.08 m below grade	The well level has remained consistent based on the 10-year historical average. There is no concern at this time.
Murdoch Glen	9.38 m below grade	9.07 m below grade	The well level has remained consistent based on the 10-year historical average. There is no concern at this time.
Point Clark Well # 2	6.70 m below grade	4.47 m below grade	The well level has remained consistent based on the 10-year historical average. There is no concern at this time.
Point Clark Well # 3	9.13 m below grade	7.52 m below grade	The well level has remained consistent based on the 10-year historical average. There is no concern at this time.

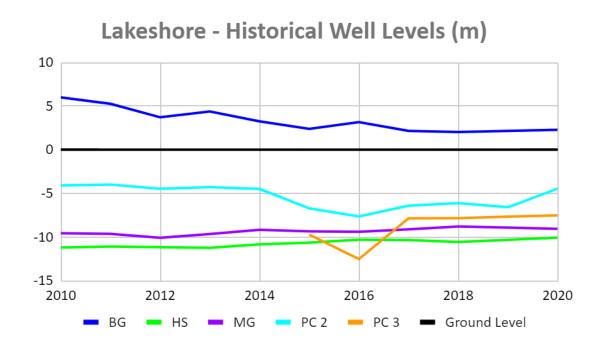
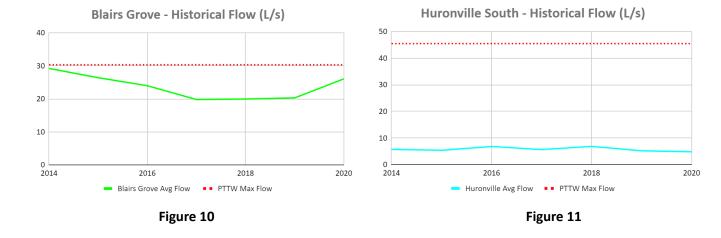


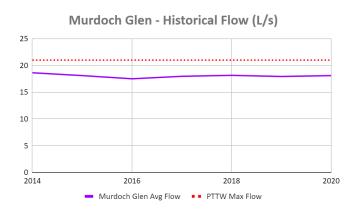
Figure 9

• Well Flows and Pump Performance:

### Table 49 -5-Year Historical Results:

Well Source	5-Year Historical Average (2015 to 2019)	2020 Average	Comments
Blairs Grove	Avg flow: 22.09 L/s Capacity: 2.95%	Avg flow: 26.04 L/s Capacity: 5.53%	Blairs Grove Well 2 had a casing failure in August. The monitoring well was tested and will be equipped as the production well in 2021.
Huronville South	Avg flow: 5.97 L/s Capacity: 13.08%	Avg flow: 4.84 L/s Capacity: 10.62%	Flows are consistent based on the 5-year historical average. There are no concerns at this time.
Murdoch Glen	Avg flow: 17.94 L/s Capacity: 5.74%	Avg flow: 18.10 L/s Capacity: 7.13%	Flows are consistent based on the 5-year historical average. There are no concerns at this time.
Point Clark Wells	Avg flow: 19.41 L/s Capacity: 26.48%	Avg flow: 20.14 L/s Capacity: 37.51%	Flows are consistent based on the 5-year historical average, however, the <b>total volumes</b> pumped from 2015 until 2020 have been increasing each year. In 2015, the capacity was 18.63% and has increased by an average of 3.7% each year, with 2020 being 37.51% capacity. This trend illuminates an <b>increasing demand in Zone 1</b> , due to additional full time residents and/or possible undetected leaks in the distribution system.







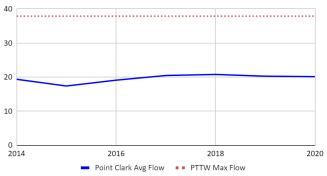


Figure 12





# Lucknow Annual and Summary Report For the 2020 Operating Year

# **PREPARED BY:**

Veolia Water Canada 100 Cove Road, Box 185 Goderich, ON N7A 3Z2 Author: Nancy Mayhew

# **TO:** Township of Huron-Kinloss Box 130 21 Queen Street Ripley, ON NOG 2R0



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# **1.0 EXECUTIVE SUMMARY**

The purpose of this report is to provide information to system Owners and Stakeholders to satisfy the regulatory requirements of the following:

- Safe Drinking Water Act (SDWA)
- Drinking Water Quality Management Standard (DWQMS)
- Section 81 of the Clean Water Act (CWA)
- Reporting required under Ontario Regulation (O. Reg.) 170/03, Section 11
- Reporting required under O. Reg. 170/03, Schedule 22

The Operating Authority (Veolia), on behalf of the Owner (Township of Huron-Kinloss), has prepared this report as a compilation of information that demonstrates the ongoing provision of a safe, consistent supply of high quality drinking water to customers supplied by the Lucknow Drinking Water System.

# SAFE DRINKING WATER ACT

Following the Walkerton Tragedy in 2000, the Ontario Government developed a new, comprehensive legislative paradigm based on a source-to-tap, multi-barrier approach to the protection of drinking water. The *Safe Drinking Water Act (SDWA)*, 2002, and its Regulations, contain requirements for Municipalities that provide potable water to their residents.

Under Section 19 (Standard of Care of the SDWA), Owners of a Drinking Water System are required to:

- a) exercise the level of care, diligence and skill in respect of a Municipal Drinking Water System that a reasonably prudent person would be expected to exercise in a similar situation; and
- b) act honestly, competently and with integrity, with a view to ensuring the protection and safety of the users of the Municipal Drinking Water System.
   2002, c. 32, s. 19(1).

The following chart outlines key aspects of the *SDWA* that relate to the Lucknow Drinking Water System:

# Legislative Framework for the Lucknow Drinking Water System

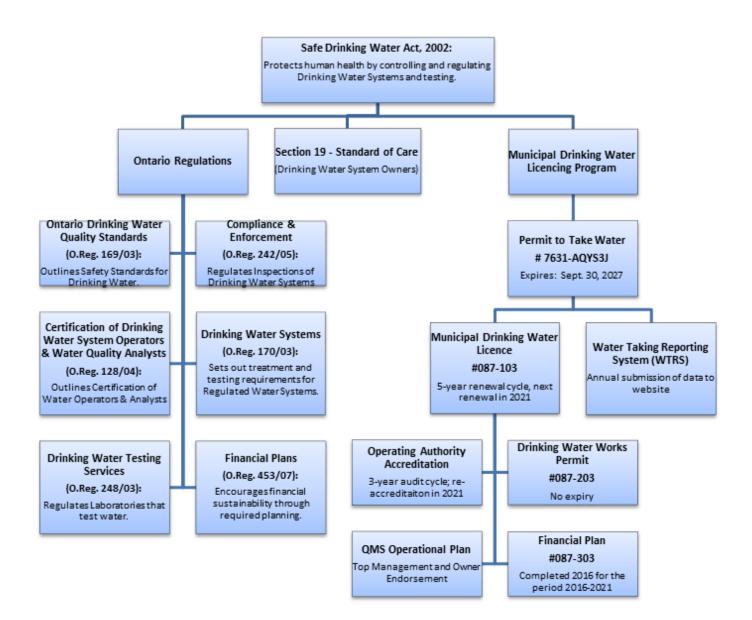


Figure 1

# 2.0 **REPORTING REQUIREMENTS:**

This report intends to provide relevant information to help the Township of Huron-Kinloss, its Council, as Owners of the Lucknow Drinking Water System, meet the Standard of Care. Its contents are organized as follows, according to specific reporting requirements under the *SDWA*:

# O. REG. 170/03, SECTION 11 - ANNUAL REPORT

- The Owner shall ensure an annual report is prepared as per O. Reg. 170/03, s. 11(1)
- The Owner of a Drinking Water System (DWS) that supplies water to another DWS shall provide a copy of the annual report to the system that receives the water
- The annual report must cover the period of January 1 to December 31 in a year and must be prepared not later than February 28 of the following year
- The annual report must:
  - Contain a brief description of the DWS, including a list of water treatment chemicals used
  - Summarize any reports made to the Ministry under s.s. 18(1) of the Act, or Sch. 16 (16-4)
  - Summarize the results of tests made under O. Reg. 170/03 and the Municipal Drinking Water Licence (MDWL)
  - O Describe any corrective actions taken under Sch. 17
  - Describe any major expenses to install, repair or replace required equipment
  - Include a statement of where a report prepared as per Sch. 22 will be available for inspection under s.s. 12(4)
  - Specify the number of points sampled as per s.s. 15.1-4(2) or s.s. 15.1-5(5), the number of samples taken, and the number of points where a sample exceeded the prescribed standard for lead
- The Owner shall ensure that a copy of an annual report for a system is given, without charge, to every person who requests a copy
- If a DWS is connected to and receives all of its drinking water from another DWS, the Owner of the system that receives the water shall ensure that a copy of an annual report for the DWS that supplies water is given, without charge, to every person who requests a copy
- Every time that an annual report is prepared for a DWS, the Owner of the system shall ensure that effective steps are taken to advise users of water from the system that copies of the report are available, without charge, and of how a copy may be obtained

# O. REG. 170/03, SCHEDULE 22 - SUMMARY REPORT FOR MUNICIPALITIES

- The Owner of a DWS shall ensure that, not later than March 31 of each year, a report is prepared as per s.s. (2) and (3) for the preceding year and is given to:
  - in the case of a DWS owned by a Municipality, the members of the Municipal Council;
  - in the case of a DWS owned by a Municipal Service Board established under s. 195 of the *Municipal Act, 2001*, the members of the Municipal Service Board; or
  - o in the case of a DWS owned by a Corporation, the Board of Directors of the Corporation

- The summary report must,
  - list the requirements of the Act, the Regulations, the system's approval, Drinking Water Works Permit (DWWP), MDWL, and any Orders applicable to the system that were not met at any time during the period covered by the report; and
  - for each requirement referred to above that was not met, specify the duration of the failure and the measures that were taken to correct the failure.
- The summary report must also include the following information for the purpose of enabling the Owner of the DWS to assess the capability of the system to meet existing and planned uses of the system:
  - A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows;
  - A comparison of the summary referred to above to the rated capacity and flow rates approved in the system's approval, DWWP or MDWL, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5(4), to the flow rates specified in the written agreement.
- If a report is prepared under s.s. (1) for a system that supplies water to a Municipality under the terms of the contract, the Owner of the DWS shall give a copy of the report to the Municipality by March 31.

# MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS (MECP) INSPECTION REPORT

• In 2006, the MECP introduced a comprehensive inspection program for Municipal Residential Drinking Water Systems. The objectives of this program are to determine compliance with the *SDWA* and associated regulations; to encourage the continuous improvement of the Drinking Water System; and to establish a process to measure these improvements.

# MUNICIPAL DRINKING WATER MANAGEMENT REVIEW

• The *SDWA*, through Municipal Drinking Water System Licensing Program, requires that the Township maintain an accredited Quality Management System (QMS) for its drinking water system. This review communicates to Council the key information related to the QMS and the Municipal Drinking Water Licencing Program.

# QMS OPERATIONAL PLAN

• The *SDWA*, through the Municipal Drinking Water Licensing Program, requires that a Municipal Drinking Water System Owner (Council) endorse the most current version of the QMS Operational Plan. This document, once endorsed, is posted on the Township of Huron-Kinloss website and is available at the Operations Centre.

The Township of Huron-Kinloss is approved by the MECP to operate a Class 2 Distribution and Supply Subsystem through its MDWL # 087-103, and to alter the system through it DWWP # 087-203.

The MECP "Municipal Drinking Water Systems" web portal provides the most current version of the *Act* and its regulations and can be found:

https://www.ontario.ca/page/municipal-drinking-water-systems-licencing-registration-and-permits

# 3.0 DESCRIPTION OF WATER SYSTEM (O. Reg. 170/03, s. 11 (6) (a))

A summary of the Lucknow Drinking Water System description is outlined below:

Drinking Water System Number:	220002663
Drinking Water System Name:	Lucknow Water Distribution and Supply
Drinking Water System Owner:	Corporation of the Township of Huron-Kinloss
Drinking Water System Category:	Large Municipal Residential
Drinking Water System Classification:	Water Distribution and Supply Subsystem Class 2
Drinking Water System Certificate No.:	1381
Daily Maximum Water Supply Capacity:	1,500 m <sup>3</sup>
Disinfection Chemicals:	Sodium Hypochlorite, 12%
Population (as per Engineer's Design notes):	1,100
Total Number of Service Connections:	665
Estimated Seasonal Population:	1,729 (based on Census data of 2.6 persons per household)
Average Day Demand:	340.97 m <sup>3</sup>
Peak Day Demand:	765.24 m³ (July 4, 2020)
Average Capacity:	36.6%
Peak Capacity:	81.8% (July 4, 2020)
Distribution Network:	13.5 km
Fire Hydrants:	65
Blow-offs:	4

The Lucknow Drinking Water Distribution and Supply Subsystem is characterized as a "secure groundwater system". It consists of two (2) well supplies and its equipment deliver potable water to the Village of Lucknow and ten (10) Lucknow South properties in the Township of Ashfield-Colborne-Wawanosh in Huron County. The Township of Huron-Kinloss has an agreement with The Township of Ashfield-Colborne-Wawanosh, where the Lucknow South distribution system is treated as part of the Lucknow Drinking Water System.

Each well supply is located within its own pumphouse in the Village of Lucknow. Both sites are controlled, monitored, and alarmed through a Supervisory Control and Data Acquisition (SCADA) system which is connected to the main controller, autodialer, and server at the Ripley Municipal Office. The desktop computer used by the system's operators is located at the Ripley Township Shed and is connected remotely to the SCADA server. As a redundancy, each site is also equipped with an auto-dialer that is independent of the SCADA system, and is used to call out alarms in the event of communications/SCADA failure. This SCADA system provides the operator with the ability to monitor current operating status of the supply and treatment equipment throughout the water system at any given time via remote access by computer or Smartphone, and to have control over operations.

The two (2) well supplies are detailed as follows:

# Site: Lucknow Well # 4 - 600 Havelock Street

•	Water Source:	Groundwater,
•	Number of Production Wells:	1 (drilled 1957
•	Donth of Walley	E 4 9 m

- Depth of Wells:
- Well Pumps:
- Disinfection:
- CT Requirement:
   Permit To Take Water:
- Groundwater, Non-GUDI 1 (drilled 1957) 54.8 m 15 hp each (vertical turbine) Sodium hypochlorite (12%) 2-log, 5°C, contact watermain (1.0 BF) 7631-AQYS3J, expires September 29, 2027

### Site: Lucknow Well # 5 - 381 South Delhi Street

- Water Source:
- Number of Production Wells:
- Depth of Well:
- Well Pump:
- Disinfection:
- CT Requirement:
- Permit To Take Water:

Groundwater, Non-GUDI 1 (drilled 1967) 58.8 m 50 hp (submersible) Sodium hypochlorite (12%) 2-log, 5°C, contact watermain (1.0 BF) 7631-AQYS3J, expires September 29, 2027

Both Lucknow wells are secure, deep bedrock wells that penetrate limestone aquifers. Due to the depth and structure of the aquifers, the water temperature is relatively constant (< 10°C), turbidity is low, and the water is relatively hard. The raw water is also relatively **high in naturally-occurring fluoride**, but the lead content of the raw water is well below the half-MAC (Maximum Allowable Concentration). Those who are supplied from the Lucknow DWS are made aware of the various concentrations in their drinking water by numerous means of communication from the Township of Huron-Kinloss.

Each pumphouse is equipped with a receptacle and manual transfer switch for a portable diesel generator in the event of an extended power outage. A stand-by propane generator is located at the Ripley Municipal Office for back-up power requirements for the office and SCADA server equipment.

The Lucknow DWS currently (December 2020) has a distribution network with a combination of PVC, copper, ductile, and cast iron water mains, in sizes varying between 1-inch and 12-inch diameter. A Standpipe, located at 656 Wheeler Street, is 6.7 m in diameter, 27.5 m high and has a total volume of 996 m<sup>3</sup>. The well pumps at Well # 4 and Well # 5 are automatically controlled by the water level in the Standpipe via communications located at 482 Ross Street (former pumphouse).

The Standpipe was built in 1930, making it approximately 90 years old. It consists of a riveted steel design (bolted steel top section), which includes a protective layer of 'shop coat' (lead and linseed oil), two (2) coats of 'anti aqua paint' (unknown), and a food grade grease paint on the interior that is intended to provide corrosion protection. The riveted steel design of Standpipes was phased out in the 1930s and is no longer used. The Standpipe is in a state of disrepair, but is currently in operable condition. As it is risky to perform aggressive cleaning without compromising its structural integrity and introducing a potential for contamination, the replacement of the Standpipe with a new Elevated Tank is currently in the design phase and is expected to begin in 2021.

# 4.0 SUMMARY OF REPORTS MADE TO THE MINISTRY (O. Reg. 170/03, s. 11 (6) (b))

- There were no Adverse Water Quality Incidents in the Lucknow DWS in 2020.
- There was a Non-Compliance with regards to the documentation of daily distribution residuals. The distribution log sheet for December 2020 was misplaced at the time of this report, therefore, there is no evidence that distribution residuals were collected each day as required. This Non-Compliance was reported to MECP Inspector, Heather Lovely.

# 5.0 SUMMARY OF WATER QUALITY MONITORING (O. Reg. 170/03, s. 11 (6) (c))

The purpose of sampling and testing is to confirm that water is safe for human consumption and to provide a comprehensive track record.

### Table 1 -Monitoring Requirements:

Parameter	Description	Required # of Samples	Requirement Source
Chlorine Residual (grab)	For monitoring amount of residual in the Distribution system, and confirming of water quality following maintenance	365/year (1 daily)	O. Reg. 170/03, Sch. 7
Chlorine Residual (continuous monitoring)	Continuous monitoring equipment used to sample and test Treated water at the location where intended contact time has been completed	5 minute intervals, minimum, each POE	O. Reg. 170/03, Sch. 7
E. Coli (EC) Total Coliform (TC) Heterotrophic Plate Count (HPC)	For testing presence of microbiological activity	108/year (Dist) 104/year (Raw) 104/year (Treated)	O. Reg. 170/03, Sch. 10
Trihalomethanes (THMs)	For testing presence of disinfection by-products (DBPs) in the Distribution system	4/year (quarterly)	O. Reg. 170/03, Sch. 13, s. 13-6
Lead (Pb)	For testing presence of lead in the Distribution system only - not private side	reduced sampling in effect for 2020	O. Reg. 170/03, Sch. 15; MDWL #087-102, Sch. D
Haloacetic Acids (HAAs)	For monitoring the formation of disinfection by- products (DBPs) in the Distribution system	4/year (quarterly, near each well supply)	O. Reg. 170/03, Sch. 13, s. 13-6.1
Nitrate and Nitrite	For testing presence of nitrates and nitrites in the Treated water at Point-of-Entry	4/year (quarterly)	O. Reg. 170/03, Sch. 13, s. 13-7
Sodium	For testing presence of sodium in the Treated water at Point-of-Entry	60 month interval	O. Reg. 170/03, Sch. 13, s. 13-8
Fluoride	For testing presence of fluoride in the treated water at Point-of-Entry	60 month interval	O. Reg. 170/03, Sch. 13, s. 13-9

# COMMUNICATIONS WHEN ADVERSE WATER SAMPLES ARE IDENTIFIED

### Requirement - Laboratory

A water sample that does not meet Provincial water quality standards is considered "adverse". When adverse water quality is detected, the accredited laboratory conducting the testing will immediately notify the Operating Authority, the Spills Action Centre (SAC), and the office of Grey Bruce Health Services, and occasionally the office of Huron-Perth Public Health (as necessary, if applicable). This notification is made by telephone through live communication to a person in authority. In addition to the phone calls, a fax of the sample results is sent to these agencies to verify the live communication made earlier.

# Requirement - Drinking Water System Owner/Operating Authority

The *SDWA* also requires the Drinking Water System Owner/Operating Authority to immediately notify the MECP and the Grey Bruce Health Services office and the Huron-Perth Public Health office (if applicable), that the laboratory notice has been received and that "corrective actions" are being initiated. The method of contact is by telephone to a person of authority. The Operating Authority also faxes Form 2A - Notices of Adverse Test Results and Issue Resolution (Schedule 16) within 24 hours to both agencies first to verify previous live communication. Once the issue has been resolved and to confirm that corrective actions have been completed, the Operating Authority also faxes Form 2B - Notices of Adverse Test Results and Issue Resolution (Schedule 16) within 7 days to the agencies. This reporting system provides assurance that the DWS Owner is complying with the applicable regulations and that appropriate corrective actions are being taken and are being reported.

# 5.1 Water Treatment Equipment Operation and Monitoring

# 5.1.1 Treated Water (Point of Entry) Free Chlorine Residuals (Grab Samples)

In 2020, a total of 730 treated water grab samples were collected and analyzed for free chlorine residual at the point of entry (POE) using a Hach pocket chlorine colorimeter. **Table 2** shows the grab samples monthly average of free chlorine residual values. **Table 3** shows the on-line continuous samples monthly average (as collected by SCADA) of the free chlorine residual values.

# 5.1.2 Distribution Free Chlorine Residuals (Grab Samples)

In 2020, a total of 445 distribution residuals were collected: 340 daily grab residuals and an additional 105 weekly grab residuals were taken in conjunction with the required weekly microbiological sampling. A summary of all the residuals collected is presented in **Table 2**.

Month	Lucknow # 4 Treated Water	Lucknow # 5 Treated Water	Lucknow Distribution
Jan	1.65	1.71	1.47
Feb	1.63	1.71	1.44
Mar	1.61	1.75	1.40
Apr	1.63	1.83	1.42
Мау	1.63	1.78	1.43
Jun	1.51	1.67	1.31
Jul	1.62	1.68	1.31
Aug	1.66	1.60	1.35
Sep	1.62	1.62	1.37
Oct	1.79	1.88	1.66
Nov	1.70	1.74	1.57
Dec	1.70	1.70	1.26*
<b>CT</b> Requirement	0.26	0.27	0.20
Annual Min	1.38	1.39	0.99
Annual Max	1.87	1.98	1.84
Annual Avg	1.65	1.72	1.43
# Samples	365	365	340

 Table 2 Average Treated and Distribution Free Chlorine Residuals (Grab Samples)

\*NOTE: The December 2020 log sheet for distribution residuals was misplaced, therefore, those residuals were not included. This Non-Compliance was reported to MECP Inspector, Heather Lovely.

Table 3 -	Average Treated Free Chlorine Residuals	On-Line Continuous from SCADA	)
	Arenage meater meeting meanadais		£

Month	Lucknow # 4 Treated Water	Lucknow # 5 Treated Water
Jan	1.42	1.73
Feb	1.65	1.75
Mar	1.63	1.79
Apr	1.63	1.82
Мау	1.64	1.78
Jun	1.53	1.68
Jul	1.64	1.70
Aug	1.68	1.62
Sep	1.63	1.61
Oct	1.84	1.89
Nov	1.73	1.75
Dec	1.74	1.72
CT Requirement	0.26	0.27
Annual Min	0.84	1.40
Annual Max	1.88	1.96
Annual Avg	1.65	1.74

### 5.1.3 Raw and Treated Water Turbidity

Raw water and treated water grab samples were collected and analyzed for turbidity using a portable turbidity analyzer. **Table 4** provides a summary of raw and treated water turbidity results.

### Table 4 Raw and Treated Water Turbidity Results (monthly average)

	Luckn	ow # 4	Lucknow # 5		
Month	Raw	Treated	Raw	Treated	
Jan	0.13	0.18	0.12	0.22	
Feb	0.14	0.20	0.12	0.25	
Mar	0.13	0.19	0.15	0.24	
Apr	0.16	0.24	0.16	0.22	
Мау	0.16	0.24	0.24 0.16		
Jun	0.13	0.21	0.14	0.22	
Jul	0.14	0.24	0.13	0.25	
Aug	0.22	0.26	0.18	0.27	
Sep	0.17	0.23	0.17	0.23	
Oct	0.19	0.27	0.17	0.24	
Nov	0.22	0.29	0.20	0.28	
Dec	0.17	0.22	0.21	0.30	
Annual Min	0.09	0.10	0.07	0.18	

Annual Max	0.31	0.39	0.26	0.38
Annual Avg	0.16	0.23	0.16	0.25
# Samples	46	44	45	44

# 5.2 Microbiological Sampling per Schedule 10, O. Reg. 170/03

### 5.2.1 Raw Water Samples

Raw water samples are collected every week. In 2020, a total of 104 samples were collected and analyzed for E. Coli and Total Coliform. **Tables 5 and 6** provide a summary of microbiological results performed on the raw water.

		Total Coliform		E. Coli			
Month	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	
Jan	4	4	0	4	4	0	
Feb	4	4	0	4	4	0	
Mar	5	5	0	5	5	0	
Apr	4	4	0	4	4	0	
May	4	4	0	4	4	0	
Jun	5	5	0	5	5	0	
Jul	4	4	0	4	4	0	
Aug	4	4	0	4	4	0	
Sep	5	5	0	5	5	0	
Oct	4	4	0	4	4	0	
Nov	4	4	0	4	4	0	
Dec	5	5	0	5	5	0	
TOTAL	52	52	0	52	52	0	

# Table 5 - Microbiological Results for Raw Water - LUCKNOW # 4

# Table 6 - Microbiological Results for Raw Water - LUCKNOW # 5

		Total Coliform		E. Coli			
Month	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	
Jan	4	4	0	4	4	0	
Feb	4	4	0	4	4	0	
Mar	5	5	0	5	5	0	
Apr	4	4	0	4	4	0	
Мау	4	4	0	4	4	0	
Jun	5	5	0	5	5	0	

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Jul	4	4	0	4	4	0
Aug	4	4	0	4	4	0
Sep	5	5	0	5	5	0
Oct	4	4	0	4	4	0
Nov	4	4	0	4	4	0
Dec	5	5	0	5	5	0
TOTAL	52	52	0	52	52	0

# 5.2.2 Treated Water (Point of Entry) Samples

One (1) treated water sample from each point of entry is taken every week and analyzed for E. Coli, Total Coliform, and Heterotrophic Plate Count (HPC). In 2020, a total of 104 treated water samples were collected and analyzed for the above parameters. Each EC and TC result from the treated water was 0 cfu/100 mL. The range of HPC results were 0 - 10 cfu/100 mL. **Tables 7 and 8** provide a summary of all microbiological results performed on treated water.

	Total Coliform			E. Coli			НРС		
Month	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1
Jan	4	4	0	4	4	0	4	3	1
Feb	4	4	0	4	4	0	4	2	2
Mar	5	5	0	5	5	0	5	3	2
Apr	4	4	0	4	4	0	4	4	0
Мау	4	4	0	4	4	0	4	4	0
Jun	5	5	0	5	5	0	5	5	0
Jul	4	4	0	4	4	0	4	3	1
Aug	4	4	0	4	4	0	4	1	3
Sep	5	5	0	5	5	0	5	4	1
Oct	4	4	0	4	4	0	4	3	1
Nov	4	4	0	4	4	0	4	3	1
Dec	5	5	0	5	5	0	5	0	5
TOTAL	52	52	0	52	52	0	52	35	17

# Table 7 Microbiological Results for Treated Water (Point of Entry) - LUCKNOW # 4

# Table 8 - Microbiological Results for Treated Water (Point of Entry) - LUCKNOW # 5

		Total Coliform			E. Coli			НРС		
Month	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	
Jan	4	4	0	4	4	0	4	3	1	
Feb	4	4	0	4	4	0	4	2	2	
Mar	5	5	0	5	5	0	5	2	3	
Apr	4	4	0	4	4	0	4	2	2	
May	4	4	0	4	4	0	4	3	1	
Jun	5	5	0	5	5	0	5	5	0	
Jul	4	4	0	4	4	0	4	4	0	
Aug	4	4	0	4	4	0	4	3	1	
Sep	5	5	0	5	5	0	5	4	1	
Oct	4	4	0	4	4	0	4	3	1	
Nov	4	4	0	4	4	0	4	4	0	
Dec	5	5	0	5	5	0	5	0	5	

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TOTAL	52	52	0	52	52	0	52	35	17

## 5.2.3 Distribution Samples

Distribution samples are collected every week and tested for E. Coli, Total Coliform, and 25% of the samples are also analyzed for Heterotrophic Plate Count (HPC). Ontario Regulation 170/03 requires 8 distribution samples plus one additional sample for every 1,000 people served by the system. In 2020, a total of 157 distribution samples were collected and analyzed for TC and EC, which is above the required number of samples (n=108, based on 1,729 potential residents). A total of 104 distribution samples were analyzed for HPC (n=27, 25% of 108). Each E. Coli result from the treated water was 0 cfu/100 mL. The range of HPC results were 0 - 14 cfu/100 mL. **Table 9** provides a summary of all microbiological samples taken in the distribution system.

	Total Coliform				E. Coli			НРС		
Month	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples ≥1	# Samples	# Samples "0"	# Samples 1 - 14	
Jan	12	12	0	12	12	0	8	3	5	
Feb	12	12	0	12	12	0	8	6	2	
Mar	15	15	0	15	15	0	10	7	3	
Apr	12	12	0	12	12	0	8	6	2	
May	12	12	0	12	12	0	8	5	3	
Jun	16	16	0	16	16	0	10	7	3	
Jul	12	12	0	12	12	0	8	7	1	
Aug	12	12	0	12	12	0	8	4	4	
Sep	15	15	0	15	15	0	10	9	1	
Oct	12	12	0	12	12	0	8	6	2	
Nov	12	12	0	12	12	0	8	2	6	
Dec	15	15	0	15	15	0	10	0	10	
TOTAL	157	157	0	157	157	0	104	62	42	

 Table 9 Microbiological Results for Distribution System

## 5.3 Chemical Sampling and Testing as per Schedule 13, O. Reg. 170/03

## 5.3.1 Inorganics (Schedule 13, s. 13-2; Schedule 23)

Treated water samples are collected every 36 months and analyzed for inorganics. The most recent samples for the Lucknow Drinking Water System were collected on June 4, 2018 and submitted to the laboratory for analysis of inorganics as listed in Schedule 23 (see **Table 10**). All parameters were found to be within compliance, however, the Arsenic level at Lucknow #5 exceeded the Half-Maximum Allowable Concentration (half-MAC). Any half-MAC exceedance must be sampled on a quarterly basis to comply with O. Reg. 170/03, Schedule 13-5(1) - Increased frequency under s.s 13-2 and 13-4.

**Table 23** (Section 7.1 - Regulatory Changes, Arsenic Results) provides a summary of the increased Arsenic sampling. In 2020, the Arsenic results from Lucknow # 4 were all below the half-MAC and are therefore no longer required for increased monitoring. **Table 26** (Section 12.0 - Observations and Historical Trends) provides some historical arsenic test results.

Inorganics will be sampled and analyzed again in June 2021.

Parameter	Lucknow # 4 Treated Water (µg/L)	Lucknow # 5 Treated Water (µg/L)	Maximum Allowable Concentration (μg/L)	Exceedance
Antimony	0.05	0.07	6	No
Arsenic	4.8	5.7	10	No
Barium	302	332	1000	No
Boron	39	34	5000	No
Cadmium	0.003 <mdl< th=""><th>0.003 <mdl< th=""><th>5</th><th>No</th></mdl<></th></mdl<>	0.003 <mdl< th=""><th>5</th><th>No</th></mdl<>	5	No
Chromium	0.07	0.47	50	No
Mercury	0.01 <mdl< th=""><th>0.01 <mdl< th=""><th>1</th><th>No</th></mdl<></th></mdl<>	0.01 <mdl< th=""><th>1</th><th>No</th></mdl<>	1	No
Selenium	0.04 <mdl< th=""><th>0.04 <mdl< th=""><th>50</th><th>No</th></mdl<></th></mdl<>	0.04 <mdl< th=""><th>50</th><th>No</th></mdl<>	50	No
Uranium	0.832	0.697	20	No

#### Table 10 -Inorganics (Schedule 13, s. 13-2; Schedule 23) Results

\*MDL = Laboratory Minimum Detection Limit

#### 5.3.2 Organics (Schedule 13, s. 13-4; Schedule 24)

Treated water samples are collected every 36 months and tested for Schedule 24 organic parameters. The most recent samples were collected on June 4, 2018. All parameters were found to be within compliance. Organics will be sampled and analyzed again in June 2021. Samples results can be found in **Table 11**.

Table 11 -	Organics (Schedule 13, s. 13-4; Schedule 24) Results	
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Parameter	Lucknow # 4 Treated Water (µg/L)	Lucknow # 5 Treated Water (µg/L)	Maximum Allowable Concentration (μg/L)	Aesthetic Objective / Operational Guideline (µg/L)	Exceedance
Benzene	0.32 <mdl< td=""><td>0.32 <mdl< td=""><td>1</td><td></td><td>No</td></mdl<></td></mdl<>	0.32 <mdl< td=""><td>1</td><td></td><td>No</td></mdl<>	1		No
Carbon Tetrachloride	0.16 <mdl< td=""><td>0.16 <mdl< td=""><td>2</td><td></td><td>No</td></mdl<></td></mdl<>	0.16 <mdl< td=""><td>2</td><td></td><td>No</td></mdl<>	2		No
1,2-Dichlorobenzene	0.41 <mdl< td=""><td>0.41 <mdl< td=""><td>200</td><td>3</td><td>No</td></mdl<></td></mdl<>	0.41 <mdl< td=""><td>200</td><td>3</td><td>No</td></mdl<>	200	3	No
1,4-Dichlorobenzene	0.36 <mdl< td=""><td>0.36 <mdl< td=""><td>5</td><td>1</td><td>No</td></mdl<></td></mdl<>	0.36 <mdl< td=""><td>5</td><td>1</td><td>No</td></mdl<>	5	1	No
1,1-Dichloroethylene	0.33 <mdl< td=""><td>0.33 <mdl< td=""><td>14</td><td></td><td>No</td></mdl<></td></mdl<>	0.33 <mdl< td=""><td>14</td><td></td><td>No</td></mdl<>	14		No
1,2-Dichloroethane	0.35 <mdl< td=""><td>0.35 <mdl< td=""><td>5</td><td></td><td>No</td></mdl<></td></mdl<>	0.35 <mdl< td=""><td>5</td><td></td><td>No</td></mdl<>	5		No
Dichloromethane	0.35 <mdl< td=""><td>0.35 <mdl< td=""><td>50</td><td></td><td>No</td></mdl<></td></mdl<>	0.35 <mdl< td=""><td>50</td><td></td><td>No</td></mdl<>	50		No
Monochlorobenzene	0.3 <mdl< td=""><td>0.3 <mdl< td=""><td>80</td><td>30</td><td>No</td></mdl<></td></mdl<>	0.3 <mdl< td=""><td>80</td><td>30</td><td>No</td></mdl<>	80	30	No
Tetrachloroethylene	0.35MDL	0.35 MDL	10		No
Trichloroethylene	0.44 <mdl< td=""><td>0.44 <mdl< td=""><td>5</td><td></td><td>No</td></mdl<></td></mdl<>	0.44 <mdl< td=""><td>5</td><td></td><td>No</td></mdl<>	5		No
Vinyl Chloride	0.17 <mdl< td=""><td>0.17 <mdl< td=""><td>1</td><td></td><td>No</td></mdl<></td></mdl<>	0.17 <mdl< td=""><td>1</td><td></td><td>No</td></mdl<>	1		No
Diquat	1 <mdl< td=""><td>1 <mdl< td=""><td>70</td><td></td><td>No</td></mdl<></td></mdl<>	1 <mdl< td=""><td>70</td><td></td><td>No</td></mdl<>	70		No
Paraquat	1 <mdl< td=""><td>1 <mdl< td=""><td>10</td><td></td><td>No</td></mdl<></td></mdl<>	1 <mdl< td=""><td>10</td><td></td><td>No</td></mdl<>	10		No
Glyphosate	1 <mdl< td=""><td>1 <mdl< td=""><td>280</td><td></td><td>No</td></mdl<></td></mdl<>	1 <mdl< td=""><td>280</td><td></td><td>No</td></mdl<>	280		No
Polychlorinated Biphenyls	0.04 <mdl< td=""><td>0.04 <mdl< td=""><td>3</td><td></td><td>No</td></mdl<></td></mdl<>	0.04 <mdl< td=""><td>3</td><td></td><td>No</td></mdl<>	3		No

\*MDL = Laboratory Minimum Detection Limit

## Table 11 Organics (Schedule 13, s. 13-4; Schedule 24) Results - Continued

Parameter	Lucknow # 4 Treated Water (µg/L)	Lucknow # 5 Treated Water (µg/L)	Maximum Allowable Concentration (µg/L)	Aesthetic Objective / Operational Guideline (µg/L)	Exceedance
Benzo(a)pyrene	0.00 4 <mdl< td=""><td>0.004 <mdl< td=""><td>0.01</td><td></td><td>No</td></mdl<></td></mdl<>	0.004 <mdl< td=""><td>0.01</td><td></td><td>No</td></mdl<>	0.01		No
Alachlor	0.02 <mdl< td=""><td>0.02 <mdl< td=""><td>5</td><td></td><td>No</td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>5</td><td></td><td>No</td></mdl<>	5		No
Atrazine+N-dealkylated metabolites	0.01 <mdl< td=""><td>0.01 <mdl< td=""><td>5</td><td></td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>5</td><td></td><td>No</td></mdl<>	5		No
Atrazine	0.01 <mdl< td=""><td>0.01 <mdl< td=""><td></td><td></td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td></td><td></td><td>No</td></mdl<>			No
Desethyl Atrazine	0.01 <mdl< td=""><td>0.01 <mdl< td=""><td></td><td></td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td></td><td></td><td>No</td></mdl<>			No
Azinphos-methyl	0.05 <mdl< td=""><td>0.05 <mdl< td=""><td>20</td><td></td><td>No</td></mdl<></td></mdl<>	0.05 <mdl< td=""><td>20</td><td></td><td>No</td></mdl<>	20		No
Carbaryl	0.05 <mdl< td=""><td>0.05 <mdl< td=""><td>90</td><td></td><td>No</td></mdl<></td></mdl<>	0.05 <mdl< td=""><td>90</td><td></td><td>No</td></mdl<>	90		No
Carbofuran	0.01 <mdl< td=""><td>0.01 <mdl< td=""><td>90</td><td></td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>90</td><td></td><td>No</td></mdl<>	90		No
Chlorpyrifos	0.02 <mdl< td=""><td>0.02 <mdl< td=""><td>90</td><td></td><td>No</td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>90</td><td></td><td>No</td></mdl<>	90		No
Diazinon	0.02 <mdl< td=""><td>0.02 <mdl< td=""><td>20</td><td></td><td>No</td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>20</td><td></td><td>No</td></mdl<>	20		No
Dimethoate	0.03 <mdl< td=""><td>0.03 <mdl< td=""><td>20</td><td></td><td>No</td></mdl<></td></mdl<>	0.03 <mdl< td=""><td>20</td><td></td><td>No</td></mdl<>	20		No
Diuron	0.03 <mdl< td=""><td>0.03 <mdl< td=""><td>150</td><td></td><td>No</td></mdl<></td></mdl<>	0.03 <mdl< td=""><td>150</td><td></td><td>No</td></mdl<>	150		No
Malathion	0.02 <mdl< td=""><td>0.02 <mdl< td=""><td>190</td><td></td><td>No</td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>190</td><td></td><td>No</td></mdl<>	190		No
Metolachlor	0.01 <mdl< td=""><td>0.01 <mdl< td=""><td>50</td><td></td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>50</td><td></td><td>No</td></mdl<>	50		No
Metribuzin	0.02 <mdl< td=""><td>0.02 <mdl< td=""><td>80</td><td></td><td>No</td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>80</td><td></td><td>No</td></mdl<>	80		No
Phorate	0.01 <mdl< td=""><td>0.01 <mdl< td=""><td>2</td><td></td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>2</td><td></td><td>No</td></mdl<>	2		No
Prometryne	0.03 <mdl< td=""><td>0.03 <mdl< td=""><td>1</td><td></td><td>No</td></mdl<></td></mdl<>	0.03 <mdl< td=""><td>1</td><td></td><td>No</td></mdl<>	1		No
Simazine	0.01 <mdl< td=""><td>0.01 <mdl< td=""><td>10</td><td></td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>10</td><td></td><td>No</td></mdl<>	10		No
Terbufos	0.01 <mdl< td=""><td>0.01 <mdl< td=""><td>1</td><td></td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>1</td><td></td><td>No</td></mdl<>	1		No
Triallate	0.01 <mdl< td=""><td>0.01 <mdl< td=""><td>230</td><td></td><td>No</td></mdl<></td></mdl<>	0.01 <mdl< td=""><td>230</td><td></td><td>No</td></mdl<>	230		No
Trifluralin	0.02 <mdl< td=""><td>0.02 <mdl< td=""><td>45</td><td></td><td>No</td></mdl<></td></mdl<>	0.02 <mdl< td=""><td>45</td><td></td><td>No</td></mdl<>	45		No
2,4-Dichlorophenoxyacetic acid	0.19 <mdl< td=""><td>0.19 <mdl< td=""><td>100</td><td></td><td>No</td></mdl<></td></mdl<>	0.19 <mdl< td=""><td>100</td><td></td><td>No</td></mdl<>	100		No
Bromoxynil	0.33 <mdl< td=""><td>0.33 <mdl< td=""><td>5</td><td></td><td>No</td></mdl<></td></mdl<>	0.33 <mdl< td=""><td>5</td><td></td><td>No</td></mdl<>	5		No
Dicamba	0.20 <mdl< td=""><td>0.20 <mdl< td=""><td>120</td><td></td><td>No</td></mdl<></td></mdl<>	0.20 <mdl< td=""><td>120</td><td></td><td>No</td></mdl<>	120		No
Diclofop-methyl	0.40 <mdl< td=""><td>0.40 <mdl< td=""><td>9</td><td></td><td>No</td></mdl<></td></mdl<>	0.40 <mdl< td=""><td>9</td><td></td><td>No</td></mdl<>	9		No
МСРА	0.00012 <mdl< td=""><td>0.00012 <mdl< td=""><td>0.1</td><td></td><td>No</td></mdl<></td></mdl<>	0.00012 <mdl< td=""><td>0.1</td><td></td><td>No</td></mdl<>	0.1		No
Picloram	1 <mdl< td=""><td>1 <mdl< td=""><td>190</td><td></td><td>No</td></mdl<></td></mdl<>	1 <mdl< td=""><td>190</td><td></td><td>No</td></mdl<>	190		No
2,4-Dichlorophenol	0.15 <mdl< td=""><td>0.15 <mdl< td=""><td>900</td><td>0.3</td><td>No</td></mdl<></td></mdl<>	0.15 <mdl< td=""><td>900</td><td>0.3</td><td>No</td></mdl<>	900	0.3	No
2,4,6-Trichlorophenol	0.25 <mdl< td=""><td>0.25 <mdl< td=""><td>5</td><td>2</td><td>No</td></mdl<></td></mdl<>	0.25 <mdl< td=""><td>5</td><td>2</td><td>No</td></mdl<>	5	2	No
2,3,4,6-Tetrachlorophenol	0.20 <mdl< td=""><td>0.20 <mdl< td=""><td>100</td><td>1</td><td>No</td></mdl<></td></mdl<>	0.20 <mdl< td=""><td>100</td><td>1</td><td>No</td></mdl<>	100	1	No
Pentachlorophenol	0.15 <mdl< td=""><td>0.15 <mdl< td=""><td>60</td><td>30</td><td>No</td></mdl<></td></mdl<>	0.15 <mdl< td=""><td>60</td><td>30</td><td>No</td></mdl<>	60	30	No

\*MDL = Laboratory Minimum Detection Limit

## 5.3.3 Trihalomethanes (Schedule 13, s. 13-6)

Distribution samples are taken every three months from representative points in the distribution system and tested for Trihalomethanes (THMs). In 2020, samples were collected during the months of February, May, August, and November. The Ontario Drinking Water Quality Standards (ODWQS) have set a Maximum Allowable Concentration (MAC) of 100  $\mu$ g/L for this parameter and it is expressed as a running annual average (RAA). In 2020, the average THM was found to be  $\mu$ g/L, which is within compliance. Refer to **Table 12** for the summary of Trihalomethane results. In 2020, samples will be collected in February, May, August, and November.

Month	THMs (μg/L)	Bromodichloro methane (μg/L)	Bromoform (µg/L)	Chloroform (µg/L)	Dibromochloro methane (µg/L)
Feb	7.2	1.2	<0.34	2.0	<0.37
May	7.9	1.2	<0.34	6.5	<0.37
Aug	11.0	1.7	<0.34	9.4	0.38
Nov	10.7	1.7	<0.34	9.0	0.39
RAA	9.2	1.4	<0.34	7.7	0.37
Maximum	18.0	2.4	<0.34	15.0	0.40
MAC (µg/L)	100				
Exceedance	No				

## Table 12 -Trihalomethane (Schedule 13, s. 13-6) Results

## 5.3.4 Haloacetic Acids (Schedule 13, s. 13-6.1)

Ontario Regulation 170/03 has been amended to include quarterly testing for Haloacetic Acids (HAAs). Distribution samples are taken every three months from representative points in the distribution system and tested for Haloacetic Acids (HAAs). In 2020, samples were collected during the months of February, May, August, and November and results are expressed as a running annual average (RAA). Results are summarized in **Table 13**.

## Table 13 -Haloacetic Acid (Schedule 13, s. 13-6.1) Results

Month	Total HAAs (μg/L)	Bromo acetic acid (μg/L)	Chloro acetic acid (µg/L)	Dichloro acetic acid (μg/L)	Dibromo acetic acid (µg/L)	Trichloro acetic acid (μg/L)
Feb	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Мау	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Aug	<5.3	<2.9	<4.7	<2.6	<2.0	<5.3
Nov	5.6	<2.9	<4.7	4.2	<2.0	<5.3
Avg	5.4	<2.9	<4.7	3.1	<2.0	<5.3
Max	5.9	<2.9	<4.7	<2.6	<2.0	<5.3
MAC (µg/L)	80					
Exceedance	No					

#### 5.3.5 Nitrate and Nitrite (Schedule 12, s. 13-7)

Treated water samples are taken every three months and tested for nitrate and nitrite. In 2020, samples were collected during the months of February, May, August, and November. The Ontario Drinking Water Quality Standards (ODWQS) have set a Maximum Allowable Concentration (MAC) of 10 mg/L for nitrates and 1 mg/L for nitrites. The results were found to be within compliance and are summarized in **Table 14**.

	LUCKNOW # 4		LUCKNOW # 5	
Month	Nitrite (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)
Feb	<0.003	<0.006	<0.003	<0.006
Мау	<0.003	<0.006	<0.003	<0.006
Aug	<0.003	<0.006	<0.003	0.006
Nov	<0.003	<0.006	<0.003	<0.006
Average	<0.003	<0.006	<0.003	0.006
Maximum	<0.003	<0.006	<0.003	0.006
MAC (mg/L)	1	10	1	10
Exceedance	No	No	No	No

#### Table 14 -Nitrate and Nitrite (Schedule 13, s. 13-7) Results

## 5.3.6 Sodium (Schedule 13, s. 13-8)

One (1) water sample is collected from each Point of Entry (treated water) every 60 months and analyzed for Sodium. The Ministry's *Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines, PIBS 4449e01, June 2006*, states: "The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets." These samples were collected on June 21, 2016. Results can be found in **Table 15**. The next sampling date for Sodium will be on or before June 21, 2021.

## 5.3.7 Fluoride (Schedule 13, s. 13-9)

One (1) water sample is collected from each Point of Entry (treated water) every 60 months and analyzed for Fluoride. The Ontario Drinking Water Quality Standards (ODWQS) have set a Maximum Allowable Concentration (MAC) of 1.5 mg/L. On August 15, 2017, samples were collected for this analysis. All four samples exceeded the MAC due to naturally occurring fluoride in the aquifers. These exceedances were reported to the Grey Bruce Health Unit and the Ministry's Spills Action Centre (AWQI # 135641). The results are summarized in **Table 15**. The next sampling date for Fluoride will be on or before August 15, 2022.

	Sodium	Fluoride	
Location	Result (mg/L)	Result (mg/L)	
Lucknow # 4 Treated Water	10.8	1.75	
Lucknow # 5 Treated Water	12.8	1.78	
MAC (mg/L)	20	1.50	
Exceedance	No	Yes	

## Table 15 Sodium (Schedule 13, s. 13-8) and Fluoride (Schedule 13, s. 13-9) Results

## 5.3.8 Lead (Schedule 15.1) - (O. Reg. 170/03, s. 11 (6) (g)

Schedule 15.1 of Ontario Regulation 170/03 requires that samples be taken during two seasons: once between December 15 and April 15, and once between June 15 and October 15. Three (3) pH and alkalinity samples were collected on January 27, 2020, and two (2) of these were also tested for lead. Three (3) pH and alkalinity samples were collected on July 13, 2020, and two (2 of these were also tested for lead. These parameters are required to be sampled and analyzed again between the months of December 2020 and April 2021, and again between June and October 2021. Lead samples are required next in the 2023 sampling season. Results for 2020 can be found in **Table 16**.

#### Table 16 Lead Sampling Program (Schedule 15.1) Results

Season	Alkalinity (mg/L)	рН	Lead (μg/L)
Dec-Apr	276 (ACW) 232 216	7.71 (ACW) 7.65 7.63	0.20 0.06
Jun-Oct	227 (ACW) 227 223	7.24 (ACW) 7.20 7.11	0.19 0.60
MAC (µg/L)			10
Exceedance			No

## 5.3.9 Non-Regulatory Testing - Aesthetic Objectives and Operational Guidelines (AO/OG)

Samples were collected from each Point of Entry (treated water) on November 21, 2016 and tested for parameters listed in the Ministry's *Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines, June 2006, PIBS 4449e01.* These results are included in **Table 17** for information purposes.

Parameter	AO/OG	Lucknow # 4 Treated Water	Lucknow # 5 Treated Water
рН	6.5 - 8.5	7.88	8.03
Alkalinity (mg/L as CaCO₃)	30 - 500	217	224
Colour (TCU)	5	3	3 <mdl< td=""></mdl<>
Total Dissolved Solids (mg/L)	500	280	274
Organic Nitrogen (mg/L)	0.15	0.05 <mdl< td=""><td>0.05 <mdl< td=""></mdl<></td></mdl<>	0.05 <mdl< td=""></mdl<>
Total Kjeldahl Nitrogen (mg/L)		0.05 <mdl< td=""><td>0.05 <mdl< td=""></mdl<></td></mdl<>	0.05 <mdl< td=""></mdl<>
Ammonia + Ammonium (mg/L)		0.06	0.06
Hydrogen Sulphide (mg/L)	0.05	0.006 <mdl< td=""><td>0.006 <mdl< td=""></mdl<></td></mdl<>	0.006 <mdl< td=""></mdl<>
Sulphide (mg/L)	0.05	0.006 <mdl< td=""><td>0.006 <mdl< td=""></mdl<></td></mdl<>	0.006 <mdl< td=""></mdl<>
Chloride (mg/L)	250	3.7	3.9
Sulphate (mg/L)	500	31	31
Hardness	80 - 100	206	209
Aluminum (μg/L)	100	0.5	2.5
Copper (µg/L)	1000	4.25	1.99
Iron (µg/L)	300	132	264
Manganese (µg/L)	50	8.38	13.8
Zinc (µg/L)	5000	3	4
Dissolved Organic Carbon (mg/L)	5	1 <mdl< td=""><td>1 <mdl< td=""></mdl<></td></mdl<>	1 <mdl< td=""></mdl<>
Methane (L/m <sup>3</sup> )	3	0.02 <mdl< td=""><td>0.02 <mdl< td=""></mdl<></td></mdl<>	0.02 <mdl< td=""></mdl<>
Ethylbenzene (µg/L)	2.4	0.33 <mdl< td=""><td>0.33 <mdl< td=""></mdl<></td></mdl<>	0.33 <mdl< td=""></mdl<>
Toluene (μg/L)	24	0.36 <mdl< td=""><td>0.36 <mdl< td=""></mdl<></td></mdl<>	0.36 <mdl< td=""></mdl<>
Xylene (µg/L)	300	0.43 <mdl< td=""><td>0.43 <mdl< td=""></mdl<></td></mdl<>	0.43 <mdl< td=""></mdl<>
m/p-xylene (µg/L)		0.43 <mdl< td=""><td>0.43 <mdl< td=""></mdl<></td></mdl<>	0.43 <mdl< td=""></mdl<>
o-xylene (μg/L)		0.17 <mdl< td=""><td>0.17 <mdl< td=""></mdl<></td></mdl<>	0.17 <mdl< td=""></mdl<>

#### Table 17 - Aesthetic Objectives and Operational Guideline Results

\*MDL = Laboratory Minimum Detection Limit

## 6.0 WATER AND CHEMICAL USE (O. Reg. 170/03, s. 11 (6) (a); Schedule 22-2 (3))

## 6.1 Chemical Usage (O. Reg. 170/03, s. 11 (6) (a))

In 2020, the total amount of 12% sodium hypochlorite (NaOCI) used to treat the water supplied by the Lucknow wells is tabulated in **Table 18** with the average chlorine dosage.

Basush	LUCKN	OW # 4	LUCKN	OW # 5
Month	Usage (kg)	Average Dosage (mg/L)	Usage (kg)	Average Dosage (mg/L)
Jan	31.54	3.92	19.62	4.00
Feb	31.82	3.88	15.70	3.72
Mar	35.74	3.80	17.38	4.07
Apr	37.84	3.78	15.56	4.04
Мау	50.60	3.82	15.14	4.00
Jun	54.38	3.80	3.80 16.96	
Jul	38.82	4.06	53.40	4.01
Aug	50.04	4.10	22.99	4.11
Sep	45.27	4.12	23.13	4.39
Oct	45.27	4.18	27.89	4.41
Nov	36.3	3.92	25.65	4.13
Dec	38.82	3.92	16.26	4.02
TOTAL	496.45		269.67	
Average	41.37	3.94	22.47	4.06

#### Table 18 - Sodium Hypochlorite Usage

Sodium Hypochlorite Grand Total Usage:	766.11 kg
Sodium Hypochlorite Average Dosage:	4.00 mg/L

## 6.2 Summary of Flow Rates, Annual Volumes and Capacities (O. Reg. 170/03, Schedule 22-2 (3))

A summary of the water supplied to the distribution system in 2020 from each well supply is provided in **Tables 19 and 20**. The combined annual volumes and capacities are provided in **Table 21**. The volumes reported for each well supply are taken from the SCADA continuous monitoring system. The flow meters were verified using a magnetic device on the following dates:

Lucknow # 4:	Raw water flow meter	June 30, 2020
Lucknow # 5:	Raw water flow meter	June 30, 2020

**NOTE:** The company that performed the annual verifications did not follow the manufacturer's instructions for testing at three different flow rates within the operating range of the meter, but rather they measured the operational flow using a magnetic clamp-on device. This was identified as a Non-Compliance during the MECP Drinking Water Inspection. When contacted, the Flow Meter Manufacturer (Sensus) did not have a procedure for verifying the mechanical flow meters used in Lucknow, as they are

deemed obsolete. Due to the COVID-19 Pandemic, we were unable to arrange for another flow meter company to perform the retest of the meter verifications. This testing will be conducted in 2021 as COVID restrictions are lifted.

Month	Raw Flow Daily Max (L/s)	lax Monthly Avg Monthly Total Raw Volume		Raw Volume Monthly Avg (m³)	Capacity Monthly Max (%)	
Jan	10.25	9.03	7,964.28	357.90	256.91	38.3%
Feb	10.23	9.02	8,167.07	473.41	281.62	50.6%
Mar	10.21	9.01	9,321.15	364.11	300.68	38.9%
Apr	10.18	9.00	9,923.68	439.21	330.79	47.0%
Мау	10.15	8.94	13,189.67	616.11	425.47	65.9%
Jun	10.05	8.91	14,240.65	613.31	474.69	65.6%
Jul	10.06	8.33	9,190.12	765.24	296.47	81.8%
Aug	10.05	8.88	12,227.72	545.51	394.44	58.3%
Sep	9.96	8.85	10,942.24	530.85	364.74	56.8%
Oct	10.04	8.85	10,648.06	444.30	343.49	47.5%
Nov	10.20	8.89	9,127.16	450.73	304.24	48.2%
Dec	10.10	8.85	9,854.35	396.60	317.88	42.4%
PTTW Max	14.42	14.42	28,439.58	935.00		
Annual Max	10.25		14,240.65	765.24		81.8%
Annual Avg		8.88	10,399.68		340.97	36.6%
Annual Total			124,796.15			

#### Table 19 - Flow Rates, Annual Volumes, and Capacities - LUCKNOW # 4

## Table 20 Flow Rates, Annual Volumes, and Capacities - LUCKNOW # 5

Month	Raw Flow th Daily Max (L/s)		Raw FlowRaw VolumeMonthly AvgMonthly Total(L/s)(m³)		Raw Volume Monthly Avg (m³)	Capacity Monthly Max (%)
Jan	32.89	31.78	4,885.96	522.03	157.61	34.8%
Feb	32.79	31.08	4,178.61	244.63	144.09	16.3%
Mar	32.81	31.57	4,278.29	206.72	138.01	13.8%
Apr	32.79	31.73	3,826.96	218.91	127.57	14.6%
Мау	33.02	31.54	3,774.28	299.29	121.75	20.0%
Jun	32.76	31.39	4,413.85	446.91	147.13	29.8%
Jul	32.81	31.54	13,413.82	921.30	432.70	61.4%
Aug	33.61	31.53	5,485.93	596.75	176.97	39.8%
Sep	32.80	31.53	5,451.99	520.58	181.73	34.7%
Oct	32.98	31.65	6,313.75	617.48	203.67	41.2%
Nov	33.30	31.65	6,001.42	427.96	200.05	28.5%
Dec	32.83	31.75	4,048.25	163.58 130.59		10.9%
PTTW Max	37.90	37.90	45,625.00	1,500		
Annual Max	33.61		13,413.82	921.30		61.4%
Annual Avg		31.48	5,497.76		179.89	12.0%

# Lucknow Annual and Summary Report For the 2020 Operating Year

Annual Total	 	65,973.10	 	

Month	Raw Volume Monthly Total (m³)	Raw Volume Daily Max (m³)	Raw Volume Monthly Avg (m³)	Capacity Monthly Max (%)
Jan	12,850.24	556.69	556.69 414.52	
Feb	12,345.68	596.81	425.71	39.8%
Mar	13,599.41	501.48	438.69	33.4%
Apr	13,750.64	535.48	458.35	35.7%
Мау	16,963.95	733.23	547.22	48.9%
Jun	18,654.50	806.22	621.82	53.7%
Jul	22,604.33	1,080.70	729.17	72.0%
Aug	17,713.65	910.28	571.41	60.7%
Sep	16,394.23	1,026.25	546.47	68.4%
Oct	16,961.81	990.02	547.16	66.0%
Nov	15,128.58	695.88	504.29	46.4%
Dec	13,902.60	514.30	448.47	34.3%
PTTW Max	45,625.00	1,500.00		
Annual Max	22,604.33	1,080.70		72.0%
Annual Avg	15,897.44		520.84	34.8%
Annual Total	190,769.24			

## Table 21 Flow Rates, Annual Volumes and Capacities - LUCKNOW # 4 AND # 5 COMBINED

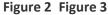
## 6.3 System Capacity (O. Reg. 170/03, Schedule 22-2 (3) Continued)

The following is a comparison of the annual volumes to the rated capacity and flow rates approved in the systems' PTTW, DWWP and MDWL. The total system capacity represents the percentage capacity of the sum of all the water produced in relation to the total system volume permitted. A summary of the totals for all the well supplies is presented in **Table 22**. The visual representations of each well and the Lucknow total capacity are presented in Figures 2 through 4.

## Table 22 - Total Volumes of All Well Supplies

Location (Well Supply)	Total Volume for 2020 (m <sup>3</sup> )		
Lucknow Well # 4	124,796.14		
Lucknow Well # 5	65,973.10		
Total Rated Capacity, PTTW (m <sup>3</sup> )	547,500.00		
Grand Total (all well supplies), Actual (m <sup>3</sup> )	190,769.24		
Overall Operating Capacity, Actual %	34.8%		





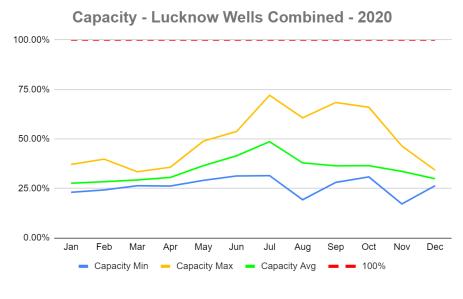


Figure 4

## 7.0 IMPROVEMENTS TO SYSTEM AND ROUTINE AND PREVENTATIVE MAINTENANCE (s. 11 (6) (e))

The following summarizes water system improvements and routine and preventative maintenance for the Lucknow Drinking Water System Supply:

#### **Both Sites:**

Routine and preventative maintenance performed as per Jobs Plus schedule. Flow meter calibrations completed. Georgian Bay Fire and Safety inspections completed. Ministry Drinking Water Inspection conducted. Semi-annual flushing and annual valve turning completed. Backflow preventer testing completed.

#### Lucknow # 4:

February:	Flow sensor fail; cleaned flow sensor, replaced duckbill on chlorine board
April:	Chlorine leak; replaced bushing at Tee on chlorine board
May:	Installed air conditioner in wellhouse
June:	Chlorine injector plugged; chiseled out buildup in header pipe

#### Lucknow # 5:

January:	Autodialer failure; Installed and programmed new autodialer
February:	New chlorine supply lines, new chlorine pump tubes
March:	Replaced backflush ball valve

## 8.0 MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS INSPECTIONS AND REGULATORY ISSUES (Schedule 22-2 (2))

- MECP Drinking Water Inspection was conducted on August 12, 2020 and awarded a rating of 98.14% (previous rating was 98.28%).
- MECP Drinking Water Inspection of South Lucknow (ACW) was conducted on August 12, 2020 and awarded a rating of 98.10% (previous rating was 100.00%).
- A list of Capital Items for 2021 was submitted to the Township of Huron-Kinloss on November 1, 2020.
- DWQMS Management Review for 2019 was conducted on June 3, 2020.
- DWQMS Internal Audit was conducted between May 8 11, 2020.
- DWQMS Complete Risk Assessment was conducted on October 29, 2020.
- DWQMS External Audit (off-site) was conducted on May 26, 2020.
- Emergency Response Exercise was not required in 2020 due to the State of Emergency declaration regarding the COVID-19 Pandemic.

## 9.0 **REGULATORY CHANGES**

Changes to Ontario Regulation 170/03 and Ontario Regulation 169/03 that strengthen standards and clarify testing requirements, new sampling and testing parameters, reporting and resampling requirements, and the removal of the 13 pesticides came into effect January 1, 2016. Updates to the standards and reporting requirements for Arsenic came into effect January 1, 2018. In 2020, the following amendment was added:

• Effective January 1, 2020, a standard for HAAs is introduced. The standard is 0.08 mg/L (80 μg/L) and must be expressed as a Running Annual Average (RAA).

## 9.1 Arsenic Sampling

In January 2018, O. Reg. 169/03 - Ontario Drinking Water Quality Standard for Arsenic was changed to 0.010 mg/L from 0.025 mg/L, making the new Half-MAC (Maximum Allowable Concentration) 0.005 mg/L. Lucknow Well # 5 is the only Lucknow well supply that has an Arsenic level in exceedance of the Half-MAC and therefore must be sampled on a quarterly basis to satisfy O. Reg. 170/03, Schedule 13-5(1) - Increased frequency under s.s 13-2 and 13-4. See **Table 23** for 2020 Lucknow Arsenic results.

#### Table 23 -Arsenic Results

Sample Date	Lucknow # 4 Arsenic Concentration (µg/L)	Lucknow # 5 Arsenic Concentration (µg/L)
Feb 10, 2020	3.7	5.3
May 11, 2020	4.1	5.5
Aug 10, 2020	3.2	4.9
Nov 16, 2020	3.6	4.6
MAC (μg/L)	10	10
Exceedance	No	No

#### NOTE:

## O. Reg. 170/03, Schedule 13: Increased frequency under s.s 13-2 and 13-4

13-5. (1) If a test result obtained under section 13-2 or 13-4 for a parameter **exceeds half of the standard prescribed** for the parameter in Schedule 2 to the Ontario Water Quality Standards, the frequency of sampling and testing for that parameter under that section shall be **increased** so that at least one sample is taken and tested **every three months.** 

## 10.0 WELL LEVELS (PTTW)

The Lucknow DWS has a Permit To Take Water (PTTW), which dictates the capacity that each well is permitted to supply, as well as specific monitoring parameters. In addition to flow, static well levels are taken on a weekly basis to monitor the performance of the aquifer. **Table 24** provides a summary of the static well levels recorded in 2020.

Mont h	Lucknow Well # 4					Lucknow Well # 4 Lucknow Well			\$5	
Jan	7.01	6.71	7.01	6.71	7.01	5.79	5.79	6.10	5.79	5.79
Feb	6.71	7.01	7.01	6.71		5.49	5.79	5.79	5.79	
Mar	7.01	7.01	6.71	6.71		5.49	5.79	5.49	5.49	
Apr	7.01	6.71	7.01	7.01	6.40	5.79	5.48	5.48	5.48	5.48
May	7.01	6.71	7.01	7.01		5.48	5.48	5.48	5.79	
Jun	6.40	7.01	6.40	7.01		5.48	5.79	5.48	5.48	6.10
Jul	7.01	7.01	7.01	7.01	7.01	5.48	6.10	6.10	6.10	
Aug	6.71	6.71	6.71	7.01		5.79	6.10	6.10	6.10	
Sep	6.71	7.01	7.01	7.01		5.79	6.10	6.40	6.10	6.10
Oct	7.31	7.31	7.01	7.31	7.31	6.10	6.10	6.10	5.79	
Nov	6.71	6.40	6.71	6.40		6.40	6.10	7.01	6.10	
Dec	5.79	5.79	6.10	5.79	5.79	6.71	6.40	6.40	6.71	6.71
Min			5.79					5.48		

## Table 24 Static Well Levels (PTTW) - Monthly Averages

Max	7.31	7.01
Avg	6.77	5.92

## 11.0 SOURCE WATER PROTECTION (Clean Water Act, 2006)

A Drinking Water Source Protection Assessment (DWSPA) Report was generated for the Ausable Bayfield Maitland Valley Source Protection Region by the Conservation Authority Source Protection Office. This report identifies vulnerable areas, recharge areas, and potential threats to help protect existing and future sources of drinking water from contamination and overuse. This report can be found on-line at:

https://www.sourcewaterinfo.on.ca/the-plans/

The Well Head Protection Areas (WHPAs) within the Lucknow Drinking Water System have 4 designations:

- WHPA-A: 100 m radius around the well head
- WHPA-B: 2-year time-of-travel capture zone
- WHPA-C: 5-year time-of-travel capture zone
- WHPA-D: 25-year time-of-travel capture zone

The Lucknow wells are NOT classified as groundwater under direct influence of surface water (GUDI).

The DWSPA report states: "The WHPA extends south-eastward from the wells to include about 7.7 km along the south Huron-Kinloss border and into Ashfield-Colborne-Wawanosh. WHPA-A, the 100 m radius around the wells, falls entirely within Huron-Kinloss. However, a small portion of WHPA-B, located in ACW, has a vulnerability score of 10. The remainder of WHPA-B has a vulnerability score of 8 or 6. The section of WHPA-C that falls into ACW has a vulnerability score of 8, 6 or 4. Finally, WHPA-D has a vulnerability score of 6 or less."

**Table 25**, taken from the report, shows a summary of significant drinking water threats within the Lucknow Drinking Water System.

	Threat	Significant Instances			
	(numbered according to Clean Water Act, 2006)	Chemical	Pathogens	DNAPL	
1	Waste Disposal Site	1			
2	Sewage System		3		
3	Agricultural Source Material Application		1		
4	Agricultural Source Material Storage		1		
6	Non-Agricultural Source Material Application				
7	Non-Agricultural Source Material Handling/Storage				
8	Commercial Fertilizer Application	2			
9	Commercial Fertilizer Handling/Storage				
10	Pesticide Application	1			
11	Pesticide Handling/Storage				
15	Fuel Handling/Storage	11			

#### Table 25 Lucknow WHPA: Summary of Significant Drinking Water Threats

16	Dense Non-Aqueous Phase Liquid Handling/Storage			2
21	Grazing/Pasturing Livestock	2	2	
TOTAL		17	7	2

In conclusion, as stated in the DWSPA Report: "No issues with wells or conditions resulting from past activities were identified within the WHPA."

## **12.0 OBSERVATIONS AND HISTORICAL TRENDS**

Raw Water Quality

• Microbiological: There were no positive microbiological test results in 2020.

Table 26 -10-Year Historical results:

Year	Well Source	Positive microbiological Result
2017 - September 5	Lucknow # 4	1 Total Coliform
2017 - October 17	Lucknow # 4	1 Total Coliform

Due to the infrequent historical results, there are no concerns at this time.

• Chemical Parameters: There were no exceedances for any of the chemical parameters tested in 2020. Sodium and Fluoride are tested every 60 months and were not required in 2020. Sodium will be sampled again in 2021, and Fluoride will be sampled in 2022. Arsenic is being tested quarterly since it is so close to the half-MAC.

Veen	Lucknow # 4			Lucknow # 5		
Year	Sodium	Fluoride	Arsenic	Sodium	Fluoride	Arsenic
2006	9.63	1.81	5.2	9.49	1.82	5.8
2009			5.1			5.1
2011	8.72	1.82		9.92	1.74	
2012			4.6			5.8
2015			5.0			6.2
2016	10.8			12.8		
2017		1.75			1.74	
2018			4.8			5.7
2019 - Jun			4.7			5.4
2019 - Sep			3.5			4.9
2019 - Nov			3.1			3.5
2020 - Feb			3.7			5.3
2020 - May			4.1			5.5

Table 27 -10-Year Historical results:

# Lucknow Annual and Summary Report For the 2020 Operating Year

2020 - Aug	 	3.2	 	4.9
2020 - Nov	 	3.6	 	4.6

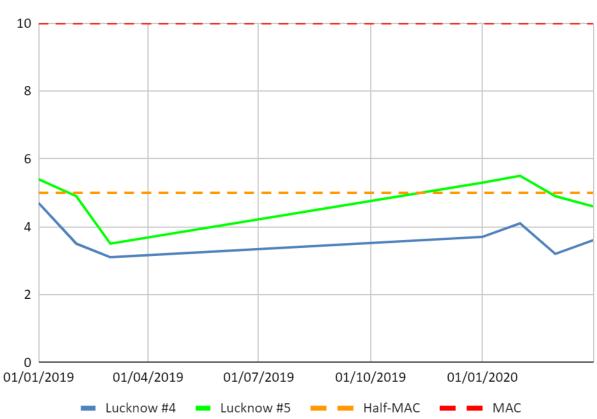


Figure 5

• Raw Turbidity:

## Table 28 - 10-Year Historical Results

Well Source	10-Year Historical Average (2010 to 2019)	2020 Average	Comments
Lucknow Well # 4	0.16 NTU	0.16 NTU	The raw turbidity has remained consistent based on the 10-year historical average. There is no concern at this time.
Lucknow Well # 5	0.15 NTU	0.23 NTU	The raw turbidity has remained consistent based on the 10-year historical average. There is no concern at this time.

Lucknow - Historical Arsenic Trending

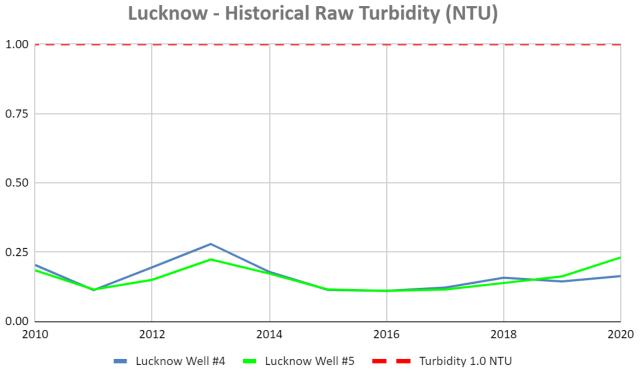


Figure 6

• Well Levels:

## Table 29 -10-Year Historical Results

Well Source	10-Year Historical Average (2010 to 2019)	2020 Average	Comments
Lucknow Well # 4	7.16 m below grade	6.80 m below grade	The well level has remained consistent based on the 10-year historical average. There is no concern at this time.
Lucknow Well # 5	6.63 m below grade	5.96 m below grade	The well level has remained consistent based on the 10-year historical average. There is no concern at this time.

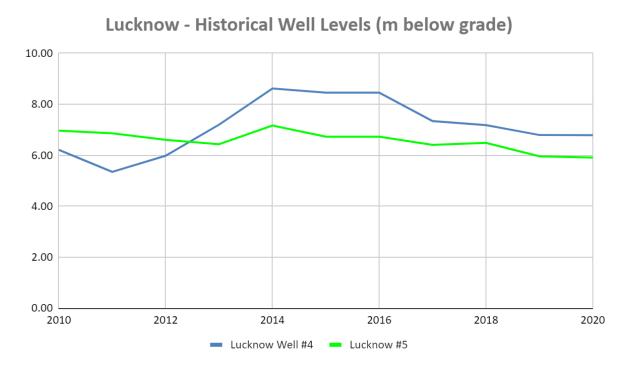


Figure 7

• Well Flows and Pump Performance:

## Table 30 -5-Year Historical Results

Well Source	5-Year Historical Average (2015 to 2019)	2020 Average	Comments
Lucknow Well # 4	Avg flow: 8.80 L/s Capacity: 10.72 %	Avg flow: 9.23 L/s Capacity: 33.04 %	Flows are consistent based on the 5-year historical average. The operation of the well cycling has been changed and the capacities are reflective of this change. There are no concerns at this time.
Lucknow Well # 5	Avg flow: 27.55 L/s Capacity: 36.28%	Avg flow: 30.91 L/s Capacity: 15.64 %	Flows are consistent based on the 5-year historical average. The operation of the well cycling has been changed and the capacities are reflective of this change. There are no concerns at this time.

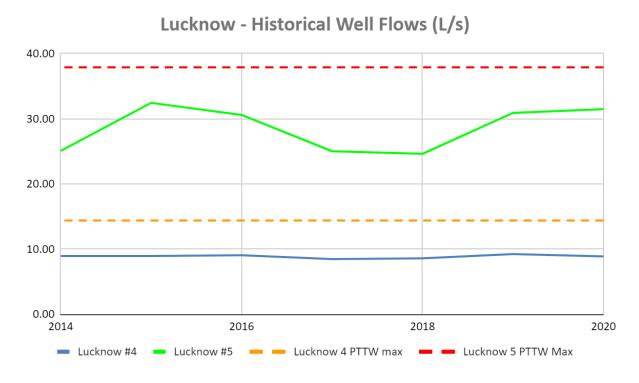


Figure 8

7.5.1 14.1



## THE CORPORATION OF THE TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH

## BY-LAW NUMBER 8-2021

## **BEING A BY-LAW** to adopt a Social Media Policy for the Township of Ashfield-Colborne-Wawanosh

**WHEREAS** section 5 (3) of the Municipal Act, 2001 S.O. 2001, as amended, provides that a municipal power, including a municipality's capacity, rights, powers, and privileges under section 9, shall be exercised by by-law unless the municipality is specifically authorized to do otherwise;

**AND WHEREAS** section 11 (2) of the Municipal Act, 2001, S.O. 2001, as amended, further authorizes lower tier municipalities to pass by-laws regarding accountability and transparency of the municipality and its operations;

**AND WHEREAS** the Township of Ashfield-Colborne-Wawanosh recognizes that social media platforms are commonly used customer service and communication tools that increase public knowledge and engagement;

**AND WHEREAS** the Township supports the development of sustainable relationships with residents and stakeholders and encourages communication for the benefit of the community;

**NOW THEREFORE** the Council of the Corporation of the Township of Ashfield-Colborne-Wawanosh enacts as follows:

- 1. That the Social Media Policy as attached hereto as Schedule 'A' be adopted.
- 2. This by-law shall come into full force and effect on the final day of passage.
- 3. This by-law may be cited as the "Social Media Policy".

Read a first and second time this 2<sup>nd</sup> day of March 2021.

Read a third time and finally passed this 2<sup>nd</sup> day of March 2021.

Mayor, Glen McNeil

CAO/Deputy Clerk, Mark Becker



## Township of Ashfield-Colborne-Wawanosh – Social Media Policy

## 1. Background

The Corporation of the Township of Ashfield-Colborne-Wawanosh is committed to building relationships with our community through strategic and relevant communication mediums. Current communication trends show residents and stakeholders demand greater access, better customer service and accurate information when and where they need it. Social media platforms are a great tool to spread news on local issues and provide a platform for citizens to access accurate and timely information on what is going in their community.

Social media platforms offer many benefits, including:

- Sharing information on programs, events, services, and news to a wide audience;
- Promote the Township online to local, regional, and national audiences;
- Disseminate time-sensitive information as quickly as possible; and
- Increase civic engagement by providing an additional tool for the public to communicate with the Township.

## 2. Purpose and Guiding Principles

The purpose of this policy is to establish consistent standards and guidelines to ensure the appropriate use and management of social media on behalf of the Township of Ashfield-Colborne-Wawanosh.

Social Media should be used as a communications tool for the intent of enhancing communication for the Township to the public for the following purposes;

- Raising awareness and sharing information
- Recruiting volunteers and employees
- Promoting township events, programs and services
- Increasing access to information
- Promoting opportunities for public involvement
- Where possible, Township social media accounts should link back to the Township website for the purpose of downloading forms, documents, and providing specific or additional information.

The guiding principles for the use of social media platforms include;

- Accessibility
- Accuracy
- Consistency
- Privacy rights of citizens
- Relevancy
- Transparency

## 3. Scope, Roles and Responsibilities

## Scope

This policy applies to Council and all Township of Ashfield-Colborne-Wawanosh employees who make public statements on the Township social media platforms.

## **Roles and Responsibilities**

## Chief Administrative Officer

The CAO is responsible for working with employees to guide and direct the conversation on social media platforms. The CAO will have final review of all posts curated by Communications Team. Upon review of social media posts, the CAO will ensure that they follow the guiding principles outlined in this policy. The CAO will periodically review social media platforms to ensure that staff are following the standards and guidelines.

## Communication Team

This formal workplace team will be comprised of the Clerk, the Social Media Administrators and at minimum the Department Head for which the communication is relevant. The Communications Teams objective is to ensure the effectiveness of our Township's communications with the citizens and other stakeholders. Regarding social media, this team will review the yearly post schedules provided by Department Heads, and review all posts provided by Social Media Administrators prior to the CAO. The team is responsible for ensuring all posts are approved by the CAO before they are made public.

## Social Media Administrators

Appointed by the CAO, in conjunction with the Communications Team the Social Media Administrators will finalize and review all material provided by different departments, manage the social media calendar, ensure all posts follow ACW's Social Media Policy guidelines, post approved content to the Townships social media platforms and monitor the social media platforms during regular business hours on behalf of the Township. This role will be in addition to a full-time staff members job description. Staff must use judgement managing time and balancing the integration of social media within their overall work plans.

## Department Head

Each Department Head will work with their staff to prepare a yearly schedule. The department head will also designate a member of their team to prepare the relevant information for each post, including applicable by-laws, links to website and contact person if applicable. The Department Head will be responsible for the communication of activities and relevant information for their department.

## 4. Definitions

"*Accessibility*" refers to the design of products, devices, services, or environments for people who experience disabilities.

*"Accuracy"* freedom from mistake or error; provides information which aligns with the Townships strategic plan priorities and vetted by the Communications Team.

*"Consistency"* conformity in messaging across social media platforms and published with the approved branding template of the Township.

*"Emergency"* a situation or an impending situation that constitutes a danger of major proportions that could result in serious harm to persons or substantial damage to property and that is caused by the forces of nature, a disease or health risk, an accident or an act whether intentional or otherwise.

*"Relevancy"* the quality or state of being closely connected or appropriate; providing citizens with information that matters the most to them and aligns with the Townships strategic plan.

"Social Media" interactive digitally mediated technologies that facilitate the creation or exchange of information; platforms utilized by the Township of Ashfield-Colborne-Wawanosh include Facebook, Twitter and LinkedIn.

*"Transparency"* the quality of being transparent; the Township's openness, communication and accountability on social media platforms.

## 5. General Policy

The Township of Ashfield-Colborne-Wawanosh website is the primary source of online information exchange with the public and is the Township's official internet presence. The Township will use social media platforms to enhance communication about Township news, programs and services to the community.

## 5.1 Account Creation & Management

Before creating a corporate social media, account or adding a new social media channel, discussion should occur between the Communication Team, CAO, and Social Media Administrators on the need for and benefit of a new account and/or channel. Adequate resources, including staff time and material, must be present for the creation of a new account.

The Communications Team will work together to determine an appropriate name, and branding information for the applicable platform. Upon creation of the social media page, the Communication Team and CAO will review all information before the account becomes public.

## 5.2 Acceptable Use of Social Media by Social Media Administrators

Social Media Administrators are permitted to engage in social media activity for corporate purposes. Social Media Administrators must use judgement managing time and balancing the integration of social media within their overall work plans.

## Maintenance

Social Media Administrators must maintain accounts to ensure they are kept current and relevant to the public. Social Media Administrators must undertake regular audits of social media comments to ensure inappropriate postings are removed in a timely fashion (e.g., commercial advertisement, disparaging remarks).

If a Social Media Administrator is no longer employed by the organization, all social media platforms will have the passwords reset to ensure that access is only available to current employees of the Township of Ashfield-Colborne-Wawanosh.

Posts

Each post will be reviewed by the Communications Team and CAO. To provide consistency across social media platforms the same messaging will be used on each platform.

Each department must provide the Social Media Administrators with the relevant information needed one week prior to the day it is to be published. This will ensure adequate time to prepare and review the information with the Communications Team and CAO.

In the event of an emergency the Social Media Administrators will be responsible for crafting a post in a timely manner. The CAO will provide guidance and approval, in the absence of the CAO the approval will come from the Communications Team and/or Mayor.

Scheduled posts should be made in the morning to allow Social Media Administrators to oversee the interactions with the post and provide feedback to citizens throughout the day in a timely manner.

Usually, the Township responds to social media comments or questions during regular business hours; Monday to Friday 8:30 a.m. to 4:00 p.m. Questions or comments made after hours will be addresses the next business day.

The Township may schedule promotional messages after business hours or on weekends.

## Sharing or Re-posting Content

When sharing or re-posting content form a social media account that is not owned by the Township of Ashfield-Colborne-Wawanosh, Social Media Administrators must follow these guidelines.

The Township may only post third party content which:

- Connects the public with information and services provided by upper tier governments or government-funded agencies or boards in Canada.
- Provides further information on subject matter found on the Townships website. Such information must be provided by an official and/or accredited source.
- A Township affiliated organization, service club or registered charity (direct partnership by way of funding, sponsorship, staff resources or in-kind contributions).
- A business improvement area operating within the municipality or upper-tier.
- Any organization approved by Council.

Any posts that include links to a personal account/website, individual business account/website, political party/candidate account/website, or objectionable material as defined in this policy must not be shared or reposted on a Township social media account.

Content promoting events:

- Organized or funded by another level of government;
- Organized by a government-funded agency or board;
- Organized by a Township affiliated organization/group;
- Funded in full, or in part, by the Township;
- Organized by a registered charitable organization operating within the Township or the County of Huron;
- Organized by a service club operating within the Township performing work that benefits Ashfield-Colborne-Wawanosh residents;
- Located in a facility owned by the Township.

Any posts that promote events that are for individual businesses, include objectionable material, do not comply with municipal, provincial or federal legislation, are political in nature, or promote an individual religion or religious service must not be shared or reposted on a Township social media account.

## Guidelines for Managing the Township of Ashfield-Colborne-Wawanosh Accounts

Social Media Administrators will reply on behalf of the Township to questions or comments which meet the below guidelines. Should a comment or question be directed at an elected official or staff, Social Media Administrators will provide them with the identified individuals work email or direct them to the contact page on the official Township website. This process will ensure that we are directing residents to the correct communication means for contacting Township staff and elected officials.

The Township may reply to questions or comments if:

- the post asks a sincere question about a Township service, program or policy.
- the post includes inaccurate information the Township may provide a correction.

The Township may not reply to questions or comments if:

- the post includes respectful statements of opinion people are welcome to express their views even if they disagree with Township policies, programs or decisions.
- the post is respectful and directed at other participants in the conversation.

## Social media commenting guidelines

The Township welcomes community members to post, share, discuss and debate while treating each other with respect. The Township will not tolerate posts or comments that include:

• Profane or inappropriate language;

- Content that promotes, fosters, or perpetuates discrimination on the basis of race, creed, colour, age, religion, gender, marital status, status with regard to public assistance, national origin, physical or mental disability or sexual orientation;
- Content considered to be defamatory, disrespectful or insulting to Township staff, representatives, or members of the public;
- Conduct or encouragement of illegal activity;
- Comments/posts not related to a posted article/topic/information;
- Business solicitation;
- Sexual content or links to sexual content;
- Information about any identifiable individual (including photographs of, or information about that individual, as well as views or opinions about that individual), unless the identifiable individual provided specific, written consent to the Township in advance;
- Any content deemed inappropriate by the Township of Ashfield-Colborne-Wawanosh.

If a comment includes any of the above the Township will hide or delete the post. Notice of this action will be given to the user. When a comment is directed at an employee, a member of Council, or a member of the public that is disrespectful and inappropriate, the Township will remove the user from the platform. The Township has a Zero-Tolerance policy on disrespectful or inappropriate comments. The user will be advised that they have violated the policy.

The social media platforms utilized by the Township have measures in place to encourage the use of the medium as effective communication tools, without fear of hateful or disrespectful comments. With our guiding principles in place, the Communications Team will endeavour to utilize tools to establish a safe place for communication for all residents, staff and elected officials.

## 5.3 Account Inactivity

The Communication Team in conjunction with the CAO has the discretionary power to add or remove an account or channel due to limited public interaction or inactivity. Accounts which are deemed inactive will be removed immediately following the decision made by the CAO and Communications Team.

## 6. Policy Communication

This policy will be communicated internally with staff and available in the shared drive. The policy will be posted on the township website for public use. The policy will also be hyperlinked onto Township social media accounts.

This policy is to be reviewed by staff on an ongoing basis as part of new employee orientation session.



## **COUNCIL REPORT**

From: Date: Subject: Florence Witherspoon, Clerk March 2, 2021 Communications Strategy

## **RECOMMENDATION:**

We seek your direction.

## **BACKGROUND:**

At the January 19 meeting of Council, staff was directed to prepare a Communications Strategy for the Township. Current communication trends show residents and stakeholders demand greater access, better customer service and accurate information when and where they need it. Traditional counter service and cash transactions have been largely replaced by mobility, eCommerce, and the need to respond instantly across a range of digital platforms. While the municipality has made significant adjustments in the way it has traditionally done business since the beginning of the pandemic, it is apparent that a broader approach to communications needs to be undertaken.

## COMMENT:

Staff has prepared the attached document with two goals in mind:

- 1. Support and encourage an engaged and informed community.
- 2. Improve Internal Communication

The Communications Strategy lays the foundation for a strategic approach to communications and will continue to build relationships with our community through relevant communications, becoming a guiding document for customer service.

The premise of the two goals is that effective external communication is not possible without effective internal communications. The Strategy is a document that gives staff the direction to pursue the proposed actions and becomes Council's expectation on how the organization moves forward with communication both internally and externally.

We have provided the document as a draft for Council's consideration.

## **OTHERS CONSULTED:**

Mark Becker, CAO Ellen McManus, Treasurer Kaitlin Bos, Tax Collector

Respectfully submitted,

Florence Witherspoon, Clerk

## ABOUT THE COMMUNICATION STRATEGY

The Communications Strategy is a guiding document for the Township of Ashfield-Colborne-Wawanosh in achieving effective two-way dialogue with its stakeholders. Council, staff, residents, and ratepayers alike all have an interest in the workings of the organization.

## PRINCIPLES

The Communications Strategy is based on the following principles:

- 1. Encourage participation and informed engagement across the organization and the community.
- 2. Consider accessibility and the diverse needs and preferences of employees and the community.
- 3. Work in collaboration across the organization to provide information that is factual, thorough, and timely.
- 4. Respect the privacy and access to information rights of all stakeholders.

## **GOAL 1:** Support and encourage an engaged and informed community.

*Objective 1: Increase ways in which the Township communicates with stakeholders.* 

Strategies:

1. Increase opportunities for residents to be informed and participate in local government.

## Proposed Actions:

- a. Livestream Council Meetings to enable a new hybrid form of meeting where in-person and remote participation can happen simultaneously.
- b. Create more opportunities for informal feedback (e.g. quick polls)
- c. Create a "How to get involved" section on the website that lists public engagement opportunities.
- d. Explore best practises in public engagement.

2. Support a stronger digital presence as a key form of customer service.

Proposed Actions:

- a. Revisit the corporate website to evolve from an information-only based platform by incorporating a variety of technological tools to enhance customer service, including e-government and e-commerce solutions.
- b. Explore opportunities for web-based platforms to facilitate conversation when consulting on major projects in our community.
- 3. Ensure citizen-government relationship is inclusive of all demographics.

**Proposed Actions** 

- a. Explore opportunities to advertise in non-traditional methods that reach all demographics.
- b. Ensure that the process for receiving and responding to feedback from the public is accessible and compliant with the AODA Accessibility Standards.
- c. Encourage and provide customer service training to help employees determine the best way to share information with different demographics.
- d. Balance the use of traditional consultation methods and emerging methods to best suit the situation.
- 4. Foster public pride and confidence in the municipal services provided by the Township.

Proposed Actions:

- a. Revitalize Branding to provide clear, accurate and high-quality messaging that reflects the positive culture of the organization. Consistent templates to establish recognition and familiarity with messaging, regardless of medium.
- b. Engage in storytelling, with positive news stories that highlight the accomplishments of staff, residents, and partners.

- c. Establish a Media Relations Policy to provide more relevant information to stakeholders on complex issues in a timely and pro-active manner.
- d. Introducing an e-newsletter and social media presence.

Objective 2: Establish strong ties with community groups, boards and committees, and associations.

Strategies:

1. Promote and share information on upcoming events put on by community groups, boards and committees, and associations within our Township.

**Proposed Actions:** 

- a. Use Township social media platforms to increase awareness for events and initiatives of groups within our community.
- b. Utilize the Kiosk locations as a place to mirror the notices that get posted online.
- c. Continue to encourage strong Council attendance at the various community functions advertised.
- 2. Spread news from upper tier municipality / province/ federal government offices.

Proposed Actions:

- a. Share information that is relevant to our residents and business posted by other levels of government on Township social media platforms.
- b. Staff to be trained and informed of the programs offered by various levels of government that could assist local businesses, community groups and residents.

#### **GOAL 2: Improve Internal Communication**

Objective 1: Increase employee's knowledge of the organization and consider themselves well-informed on the issues and initiatives of the Township.

#### Strategies:

1. Foster a communication culture within our organization.

#### **Proposed Actions:**

- a. Establish a Communications Team that is responsible for overseeing the implementation of this strategy.
- b. Make corporate communication accessible and inclusive by creating an 'intranet' where all staff can access policies, resources, and schedules easily.
- c. Host regular staff meetings and share internal briefing notes to keep employees informed about functions, priorities, and initiatives.
- d. Conduct an internal policy audit and establish a current, accessible, and inclusive universal policy structure.
- 2. Create a strong connection between all members of the organization.

**Proposed Actions:** 

- a. Ensure that an overview of the organizational structure and function guide is included in the orientation of new employees and available to all employees at any time.
- b. Encourage regular departmental meetings that engage employees on important issues.
- c. Host annual employee social event to encourage networking and relationship building among staff.
- d. Work to ensure employees are informed of initiatives before advising public.

Objective 2: Increase employee's readiness for communication and problem solving across departments.

Strategies:

1. Prepare communication procedures for all staff members to review and have access to.

Proposed Actions:

- a. Develop policies and procedures around communication mediums to properly train staff on communication practices.
- b. Encourage training opportunities and resources for employees to improve their communications skills.
- 2. Act on feedback to improve readiness for communication and problem solving.

**Proposed Actions:** 

- a. Staff will acknowledge and use feedback to create Township resources and/ or social media posts which meet the demands of citizens.
- b. Staff will meet regularly to discuss the feedback received, and work to improve strategies to better meet citizen's needs.

7.5.3

14.2

TOWNSHIP OF ASHFIELD - COLBORNE - WAWANOSH

THE CORPORATION OF THE TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH

#### **BY-LAW NUMBER 16-2021**

BEING A BY-LAW to authorize voting by internet and telephone as the alternative voting method for the Township of Ashfield-Colborne-Wawanosh 2022 Municipal Election

WHEREAS Section 42 of the Municipal Elections Act, R.S.O. 1996 provides that a municipal council may pass a by-law authorizing the use of alternative voting methods;

AND WHEREAS Council deems it appropriate to conduct the 2022 Municipal Election using a vote by internet/telephone method to provide election services;

NOW THEREFORE the Council of the Corporation of the Township of Ashfield-Colborne-Wawanosh enacts as follows:

- 1. The alternative voting method of "internet/telephone" is hereby authorized for the Municipal Election to be held in 2022.
- 2. The Clerk is hereby authorized and directed to secure an agreement with an appropriate service provider for the provision of internet/telephone voting services.
- 3. The alternative voting method of internet/telephone will be used for the advanced polling period.
- 4. No proxy voting is applicable for the Municipal Election conducted in accordance with this by-law.
- 5. This by-law shall come into force and take effect immediately upon final passing thereof.

Read a first and second time this 2<sup>nd</sup> day of March 2021.

Read a third time and finally passed this 2<sup>nd</sup> day of March 2021.

Mayor, Glen McNeil

CAO/Deputy Clerk, Mark Becker

Lucknow & District Joint Recreation Budget	2010 4 4 7	2020 P 1	2020 4 4 7	2021 D 1
	2019 Actual	2020 Budget	2020 Actual	2021 Budget
9500 Admin & General				
Revenue				
01-9500-3025 Donations	-\$1,182.57	\$0.00	-\$1,610.00	\$0.0
01-9500-3030 Advertising Board Rentals	-\$12,025.00			
01-9500-3035 Socan Receipts	\$0.00			
01-9500-3040 Grass Cutting / Watering Revenue	-\$12,640.00			
01-9500-3045 Miscellaneous	\$0.00			
01-9500-3050 Catering Events	-\$1,559.14			
01-9500-3500 Transfer from Reserve	-\$500.00			
01-9500-4000 Penalty & Interest - Accounts Receivable	\$0.00			
Foto Poto Penalty & Interest         Precounts Receivable           Fotal Revenue	-\$27,906.71	-\$23,200.00	-\$22,107.44	
	. ,	. ,	. ,	
Expense				
01-9500-7100 Wages	\$109,825.31	\$110,000.00	\$100,900.99	\$132,000.0
01-9500-7200 Benefits	\$30,136.98	\$30,000.00	\$25,194.86	\$35,000.0
01-9500-7251 Service Charges	\$550.00	\$600.00	\$300.00	\$500.0
01-9500-7252 Administration Fee	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.0
01-9500-7254 Office Supplies	\$612.63	\$700.00	\$179.55	\$700.0
01-9500-7255 Household Supplies	\$1,018.84	\$1,500.00	\$1,433.50	\$1,750.0
01-9500-7256 Office Equipment - R & M - Services	\$96.16	\$300.00	\$654.82	\$300.0
01-9500-7257 Office Equipment - R & M - Supplies	\$324.61	\$300.00	\$219.79	\$300.0
01-9500-7260 Telephone	\$1,952.50	\$2,500.00	\$1,441.19	\$1,500.0
01-9500-7261 Advertising	\$1,255.51	\$1,500.00	\$723.93	\$1,000.0
01-9500-7265 Association Memberships	\$440.72	\$500.00	\$407.04	\$750.0
01-9500-7266 Insurance	\$9,606.42	\$10,500.00	\$12,061.30	\$12,000.0
01-9500-7267 Legal	\$0.00	\$500.00	\$0.00	\$0.0
01-9500-7268 Audit	\$1,100.00	\$1,100.00	\$1,100.00	\$1,100.0
01-9500-7270 Meetings - Registration	\$0.00	\$0.00	\$0.00	\$0.0
01-9500-7271 Meetings - Travel	\$76.55	\$100.00	\$0.00	\$100.0
01-9500-7272 Meetings - Meals	\$0.00	\$0.00	\$0.00	\$0.0
01-9500-7273 Web Site design	\$488.45	\$250.00	\$0.00	\$250.0
01-9500-7275 Miscellaneous	\$1,092.06	\$1,500.00	\$751.71	\$1,500.0
01-9500-7300 Conferences - Registration	\$0.00	\$0.00	\$0.00	\$0.0
01-9500-7301 Conferences - Accomodations	\$0.00	\$0.00	\$0.00	\$0.0
01-9500-7302 Conferences - Travel & Parking	\$0.00	\$0.00	\$0.00	\$0.0
01-9500-7303 Conferences - Meals	\$0.00	\$0.00	\$0.00	\$0.0
01-9500-7304 Student Memberships	\$0.00	\$0.00	\$0.00	\$0.0
01-9500-7305 Training - Registration	\$671.62	\$3,000.00	\$284.83	\$2,500.0
01-9500-7306 Training - Accomodations	\$0.00	\$500.00	\$0.00	\$500.0
01-9500-7307 Training - Travel & Parking	\$340.81	\$500.00	\$0.00	\$500.0
01-9500-7308 Training - Meals	\$7.56	\$200.00	\$0.00	\$200.0
)1-9500-7320 Utilities - Hydro	\$73,673.66			
01-9500-7321 Utilities - Water	\$9,607.87			

	2019 Actual	2020 Budget	2020 Actual	2021 Budget
01-9500-7322 Utilities - Sewage	\$645.00	\$650.00	\$680.00	\$700.00
01-9500-7323 Building - R & M - Services	\$17,568.15	\$18,000.00	\$11,124.92	\$18,000.00
01-9500-7324 Building - R & M - Supplies	\$5,826.93	\$6,000.00	\$6,167.09	\$7,500.00
01-9500-7325 Socan Fees	\$188.33	\$200.00	\$202.08	\$200.00
01-9500-7326 Elevator Lift - R & M - Services/Supplies	\$0.00	\$500.00	\$0.00	\$500.00
01-9500-7327 Elevator Lift - Contract	\$1,056.00	\$1,100.00	\$1,106.00	\$1,150.00
01-9500-7330 Catering Events	\$1,489.08	\$1,100.00	\$488.12	\$400.00
01-9500-7348 Vehicle R & M - Supplies/Services	\$211.59	\$750.00	\$444.53	\$750.00
01-9500-7349 Vehicle Fuel - Gas	\$1,361.16	\$1,500.00	\$550.01	\$1,000.00
01-9500-7350 Equipment Fuel - Diesel	\$1,049.03	\$1,200.00	\$818.05	\$1,200.00
01-9500-7352 Depreciation Expense	\$0.00	\$0.00	\$0.00	\$0.00
01-9500-7357 Equipment - R & M - Services	\$933.71	\$1,200.00	\$503.76	\$1,200.00
01-9500-7358 Equipment - R & M - Supplies	\$2,169.59	\$3,000.00	\$3,089.80	\$3,500.00
01-9500-7362 Yard & Parking Lot - Services/Supplies	\$6,304.72	\$7,000.00	\$5,097.57	\$7,500.00
01-9500-7400 Transfer to Reserve	\$500.00	\$0.00	\$315.00	\$0.00
Total Expense	\$287,181.55	\$289,750.00	\$239,816.35	\$307,050.00
Dept Excess Revenue Over (Under) Expenditures	\$259,274.84	\$266,550.00	\$217,708.91	\$285,050.00
9501 Arena Winter				
Revenue				
01-9501-3803 Ice Rental Receipts	-\$48,428.24	-\$58,000.00	-\$29,891.42	-\$25,000.00
01-9501-3804 Public Skating Receipts	-\$5,220.00	-\$5,500.00	-\$3,445.04	-\$2,500.00
01-9501-3805 Concession Booth Receipts	\$0.00	\$0.00	\$0.00	\$0.00
01-9501-3820 Time Clock Wage Recovery	-\$295.00	-\$250.00	-\$75.00	-\$150.00
01-9501-3825 Hockey Insurance Recovery	\$0.00	\$0.00	-\$1,440.00	-\$1,500.00
01-9501-3831 Minor Hockey Ice Rental/Sub	-\$44,030.00	-\$53,000.00	-\$44,300.25	-\$25,000.00
01-9501-3833 Figure Skating Ice Rental/Sub	\$0.00	\$0.00	\$0.00	\$0.00
01-9501-3835 Learn to Skate Receipts	-\$9,000.00	-\$8,000.00	-\$2,025.00	-\$4,000.00
Total Revenue	-\$106,973.24	-\$124,750.00	-\$81,176.71	-\$58,150.00
Expense				
01-9501-7100 Wages	\$40,595.66	\$44,000.00	\$35,925.81	\$40,000.00
01-9501-7200 Benefits	\$7,891.37	\$8,500.00	\$6,049.06	\$8,500.00
01-9501-7255 Household Supplies	\$0.00		\$0.00	\$0.00
01-9501-7260 Telephone	\$0.00	\$0.00	\$0.00	\$0.00
01-9501-7266 Insurance	\$0.00	\$0.00	\$1,425.60	\$0.00
01-9501-7318 Utilities - Propane	\$14,260.71	\$18,000.00	\$10,695.33	\$15,000.00
01-9501-7323 Ice Plant - R & M - Services	\$9,310.02	\$10,000.00	\$9,583.20	\$10,000.00
01-9501-7324 Ice Plant - R & M - Supplies	\$2,573.18	\$2,800.00	\$2,375.59	\$2,800.00
01-9501-7352 Olympia - R & M	\$399.69	\$500.00	\$328.11	\$500.00
01-9501-7353 Olympia - Propane	\$1,637.02	\$1,800.00	\$1,685.12	\$1,800.00
01-9501-7354 Health & Safety	\$201.88	\$250.00	\$29.08	\$250.00
01-9501-7356 Learn to Skate	\$2,680.10	\$2,750.00	\$2,041.64	\$2,500.00
Total Expense	\$79,549.63	\$88,600.00	\$70,138.54	\$81,350.00
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Dept Excess Revenue Over (Under) Expenditures	-\$27,423.61	-\$36,150.00	-\$11,038.17	\$23,200.00
	2019 Actual	2020 Budget	2020 Actual	2021 Budget
9502 Arena Summer				
P				
Revenue	<b>\$5,055,00</b>	¢ 4 500 00	¢1.c1.02	<b>\$500.00</b>
01-9502-3800 Rental Receipts	-\$5,855.00	-\$4,500.00	-\$161.03	-\$500.00
01-9502-4900 Provincial Grant	\$0.00	\$0.00	\$0.00	\$0.00
Total Revenue	-\$5,855.00	-\$4,500.00	-\$161.03	-\$500.00
Expense		<b>***</b>		<b>***</b>
01-9502-7100 Wages	\$17,567.57	\$21,000.00	\$15,736.41	\$23,000.00
01-9502-7200 Benefits	\$5,166.30	\$4,000.00	\$3,209.92	\$4,000.00
01-9502-7301 Paid Security	\$2,078.17	\$1,500.00	\$0.00	\$300.00
01-9502-7354 Health & Safety	\$146.18	\$200.00	\$171.94	\$250.00
Total Expense	\$24,958.22	\$26,700.00	\$19,118.27	\$27,550.00
Dept Excess Revenue Over (Under) Expenditures	\$19,103.22	\$22,200.00	\$18,957.24	\$27,050.00
9504 Paul Henderson Hall				
Revenue				
01-9504-3800 Rental Receipts	-\$1,145.00	-\$1,000.00	-\$425.00	-\$500.00
01-9504-3818 Bar Supply Sales	\$0.00	\$0.00	\$0.00	\$0.00
Total Revenue	-\$1,145.00	-\$1,000.00	-\$425.00	-\$500.00
Expense	¢5 170 77	¢5 000 00	¢1 (07 29	¢2 500 00
01-9504-7100 Wages	\$5,179.77	\$5,000.00	\$1,697.38	\$2,500.00
01-9504-7200 Benefits	\$1,434.57	\$1,500.00	\$322.17	\$500.00
01-9504-7255 Household Supplies	\$0.00	\$0.00	\$0.00	\$0.00
01-9504-7318 Utilities - Propane	\$0.00	\$0.00	\$0.00	\$0.00
Total Expense	\$6,614.34	\$6,500.00	\$2,019.55	\$3,000.00
Dept Excess Revenue Over (Under) Expenditures	\$5,469.34	\$5,500.00	\$1,594.55	\$2,500.00
9505 Fitness Centre				
Revenue				
01-9505-3800 Rental Receipts	\$0.00	\$0.00	\$0.00	\$0.00
01-9500-3810 Donations	\$668.00	-\$700.00	-\$702.00	-\$700.00
Total Revenue	-\$668.00	-\$700.00	-\$702.00	-\$700.00
	-\$008.00	-\$700.00	-\$702.00	-\$700.00
Expense				
01-9505-7100 Wages	\$70.07	\$300.00	\$485.63	\$200.00
01-9505-7200 Benefits	\$16.31	\$100.00	\$87.89	\$50.00
01-9505-7255 Household Supplies	\$0.00	\$0.00	\$0.00	\$0.00
01-9505-7323 Building R & M - Services/Supplies	\$36.66	\$300.00	\$807.42	\$350.00
Total Expense	\$123.04	\$700.00	\$1,380.94	\$600.00
Dept Excess Revenue Over (Under) Expenditures	-\$544.96		\$678.94	-\$100.00
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9506 Dave Farrish Champions Chamber				
-	2019 Actual	2020 Budget	2020 Actual	2021 Budget
Revenue				
01-9506-3800 Rental Receipts	-\$6,070.00	-\$4,500.00	-\$1,680.00	-\$2,500.00
Total Revenue	-\$6,070.00	-\$4,500.00	-\$1,680.00	-\$2,500.00
Expense				
01-9506-7100 Wages	\$1,578.91	\$1,500.00	\$1,282.58	\$1,250.00
01-9506-7200 Benefits	\$398.57	\$400.00	\$213.89	\$250.00
01-9506-7255 Household Supplies	\$0.00	\$0.00	\$0.00	\$0.00
Total Expense	\$1,977.48	\$1,900.00	\$1,496.47	\$1,500.00
Dept Excess Revenue Over (Under) Expenditures	-\$4,092.52	-\$2,600.00	-\$183.53	-\$1,000.00
9510 Hockey				
Revenue				
01-9510-3025 Donations	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-3500 Transfer from Reserve	-\$2,080.14	\$0.00	-\$1,640.00	\$0.00
01-9510-3814 Registration Receipts	-\$200.00	\$0.00	\$0.00	\$0.00
01-9510-3820 Gate Receipts	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-3821 Season Passes	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-3825 Clothing Sales	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-3830 L.A.W.S.	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-3835 OMHA Clinic Registrations	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-3840 Minor Hockey Fundraising	\$0.00	\$0.00	\$0.00	\$0.00
Total Revenue	-\$2,280.14	\$0.00	-\$1,640.00	\$0.00
Expense				
01-9510-7100 Wages	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7200 Benefits	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7254 Office Supplies	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7260 Telephone	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7261 Advertising	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7266 Player Insurance	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7271 Meetings - Travel	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7272 Meetings - Meals	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7273 Website	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7400 Transfer to Reserve	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7403 Minor Hockey Fundraising	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7510 Referees	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7511 Association Fees	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7513 Tournament Expenses	\$1,680.14	\$0.00	\$0.00	\$0.00
01-9510-7514 Equipment	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7515 Sweater Purchases	\$0.00	\$0.00	\$1,640.00	
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01-9510-7517 Banquet	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7518 Trophies/Banners	\$400.00	\$0.00	\$0.00	\$0.00
01-9510-7519 Clothing	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7520 Power Skating	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7530 OMHA Clinics - Fees	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7535 OMHA Clinics - Meals	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7540 OMHA Clinics - Reimbursements	\$0.00	\$0.00	\$0.00	\$0.00
01-9510-7700 Ice Rental	\$0.00	\$0.00	\$0.00	\$0.00
Total Expense	\$2,080.14	\$0.00	\$1,640.00	\$0.00
Dept Excess Revenue Over (Under) Expenditures	-\$200.00	\$0.00	\$0.00	\$0.00
9520 Bar Sales				
D				
Revenue	¢72 426 22	¢c4.000.00	¢20 (12 21	¢25 000 00
01-9520-3025 Beer Sales	-\$73,436.32	-\$64,000.00	-\$30,613.31	-\$25,000.00
01-9520-3800 Liquor Sales	-\$19,606.16	-\$14,000.00	-\$2,287.61	-\$2,500.00
01-9520-3805 Cooler Sales	-\$4,115.01	-\$2,500.00	-\$584.06	-\$500.00
01-9520-3810 Pop Sales	-\$107.98	-\$100.00	-\$14.16	-\$50.00
01-9520-3815 Chip Sales	-\$81.42	\$0.00	\$0.00	\$0.00
01-9520-3820 Alcohol Ticket Sales Unused	-\$1,311.51	-\$500.00	-\$84.07	-\$250.00
Total Revenue	-\$98,658.40	-\$81,100.00	-\$33,583.21	-\$28,300.00
Evponso				
<b>Expense</b> 01-9520-7100 Wages	\$7,938.15	\$7,500.00	\$2,964.92	\$3,000.00
01-9520-7100 wages 01-9520-7200 Benefits			\$2,904.92 \$407.41	\$3,000.00
	\$1,275.57	\$1,100.00		
01-9520-7254 Office Supplies	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00
01-9520-7261 Advertising	\$113.34	\$100.00		\$100.00
01-9520-7266 Insurance	\$540.00	\$600.00	\$891.00	\$900.00
01-9520-7326 Chips	\$43.77	\$50.00	\$0.00	\$50.00
01-9520-7346 Refrigeration Trailer Rentals	\$1,500.00	\$1,200.00	\$0.00	\$600.00
01-9520-7357 Equipment - R & M - Services	\$407.50	\$500.00	\$717.32	\$750.00
01-9520-7358 Equipment - R & M - Supplies	\$0.00	\$200.00	\$0.00	\$200.00
01-9520-7505 Liquor License Fees	\$0.00	\$0.00	\$0.00	\$0.00
01-9520-7510 Beer	\$38,816.74	\$34,000.00	\$17,383.47	\$18,000.00
01-9520-7511 Liquor	\$4,548.40	\$3,500.00	\$364.70	\$500.00
01-9520-7512 Bar Supplies	\$449.98	\$500.00	\$68.99	\$500.00
01-9520-7513 Coolers	\$1,905.20	\$1,500.00	\$213.84	\$500.00
01-9520-7514 Pop	\$678.40	\$750.00	\$321.62	\$300.00
01-9520-7515 Smart Serve Training	\$34.95	\$100.00	\$34.95	\$100.00
01-9520-7525 Profit Share - Lucknow Lancers	\$7,522.56	\$7,250.00	\$1,737.00	\$1,500.00
01-9520-7530 Profit Share - Service Clubs	\$3,681.08	\$4,000.00	\$2,920.35	\$1,000.00
01-9520-7535 Profit Share - Stag & Does	\$10,665.93	\$5,000.00	\$0.00	\$0.00
Total Expense	\$80,121.57	\$67,850.00	\$28,025.57	\$28,450.00
Dept Excess Revenue Over (Under) Expenditures	-\$18,536.83	-\$13,250.00	-\$5,557.64	\$150.00

9525 Baseball/Softball

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	2019 Actual	2020 Budget	2020 Actual	2021 Budget
Revenue		g		
01-9525-3025 Donations	\$0.00	\$0.00	\$0.00	\$0.00
01-9525-3800 Registration Receipts	-\$3,805.00	-\$3,500.00	\$0.00	-\$3,500.00
01-9525-3810 Tournament Receipts	\$0.00		\$0.00	
01-9525-3824 Sweater Donations	\$0.00		\$0.00	
Total Revenue	-\$3,805.00		\$0.00	
Expense				. ,
01-9525-7100 Wages	\$0.00	\$0.00	\$0.00	\$0.00
01-9525-7200 Benefits	\$0.00		\$0.00	\$0.00
01-9525-7254 Office Supplies	\$0.00	\$0.00	\$0.00	\$0.00
01-9525-7261 Advertising	\$0.00	\$0.00	\$0.00	\$0.00
01-9525-7266 Player Insurance	\$0.00	\$0.00	\$0.00	\$0.00
01-9525-7275 Miscellaneous	\$0.00	\$0.00	\$0.00	\$0.00
01-9525-7511 Association Fees	\$520.00	\$600.00	\$0.00	\$700.00
01-9525-7513 Tournament Expenses	\$93.90	\$1,000.00	\$0.00	\$1,000.00
01-9525-7514 Equipment	\$535.42		\$0.00	
01-9525-7517 Umpires	\$692.00	\$800.00	\$0.00	\$800.00
Total Expense	\$1,841.32	\$3,050.00	\$0.00	\$3,150.00
Dept Excess Revenue Over (Under) Expenditures	-\$1,963.68	-\$450.00	\$0.00	-\$350.00
9535 Soccer				
Revenue	¢100.00	¢0.00	<b><i><b></b><b></b></i></b>	¢0.00
01-9535-3025 Donations	-\$100.00		-\$579.70	
01-9535-3800 Registration Receipts	-\$7,015.00		\$0.00	
01-9535-3805 Field Rentals	-\$60.00		\$0.00	
01-9535-3810 Tournament Receipts	\$0.00		\$0.00	-
Total Revenue	-\$7,175.00	-\$7,000.00	-\$579.70	-\$7,100.00
Expense				
01-9535-7100 Wages	\$0.00	\$0.00	\$0.00	\$0.00
01-9535-7200 Benefits	\$0.00	\$0.00	\$0.00	\$0.00
01-9535-7254 Office Supplies	\$0.00	\$0.00	\$0.00	\$0.00
01-9535-7261 Advertising	\$0.00		\$0.00	\$0.00
01-9235-7266 Player Insurance	\$648.00	\$750.00	\$0.00	\$750.00
01-9535-7510 Referees	\$720.00	\$1,000.00	\$0.00	\$1,000.00
01-9535-7511 Association Fees	\$75.00	\$100.00	\$0.00	\$100.00
01-9535-7513 Tournament Fees	\$185.00	\$300.00	\$129.31	\$300.00
01-9535-7514 Equipment	\$265.62	\$500.00	\$0.00	\$500.00
01-9535-7515 Jersey Purchases	\$0.00	\$0.00	\$0.00	\$0.00
Total Expense	\$1,893.62	\$2,650.00	\$129.31	\$2,650.00
Dept Excess Revenue Over (Under) Expenditures	-\$5,281.38	-\$4,350.00	-\$450.39	-\$4,450.00

9540 Summer Sports Camp

	2019 Actual	2020 Budget	2020 Actual	2021 Budget
Revenue				
01-9540-3800 Registration Receipts	-\$5,337.00	\$5,000.00	\$0.00	\$5,000.00
01-9540-4900 Provincial Grant	\$0.00	\$0.00	\$0.00	\$0.00
Total Revenue	-\$5,337.00	-\$5,000.00	\$0.00	-\$5,000.00
Expense				
01-9540-7100 Wages	\$3,336.36	\$3,000.00	\$0.00	\$3,000.00
01-9540-7200 Benefits	\$245.83	\$250.00	\$0.00	\$250.00
01-9540-7261 Advertising	\$115.32	\$200.00	\$0.00	\$200.00
01-9540-7266 Insurance	\$0.00	\$0.00	\$0.00	\$0.00
01-9540-7305 Training - Registration	\$0.00	\$0.00	\$0.00	\$0.00
01-9540-7307 Training - Travel & Parking	\$0.00	\$0.00	\$0.00	\$0.00
01-9540-7326 Materials & Supplies	\$1,602.70	\$1,000.00	\$0.00	\$1,000.00
Total Expense	\$5,300.21	\$4,450.00	\$0.00	\$4,450.00
Dept Excess Revenue Over (Under) Expenditures	-\$36.79	-\$550.00	\$0.00	-\$550.00
9542 Splash Pad				
Revenue				
01-9542-3800 Revenues	\$0.00	\$0.00	\$0.00	\$0.00
Total Revenue	\$0.00	\$0.00	\$0.00	\$0.00

Expense				
01-9542-7100 Wages	\$106.85	\$150.00	\$337.84	\$300.00
01-9542-7200 Benefits	\$37.84	\$50.00	\$83.64	\$100.00
01-9542-7261 Advertising	\$0.00	\$0.00	\$0.00	\$0.00
01-9542-7326 Materials & Supplies	\$538.30	\$550.00	\$0.00	\$500.00
01-9542-7514 Equipment	\$0.00	\$100.00	\$0.00	\$100.00
Total Expense	\$682.99	\$850.00	\$421.48	\$1,000.00
Dept Excess Revenue Over (Under) Expenditures	\$682.99	\$850.00	\$421.48	\$1,000.00

#### 9545 Swimming Pool

Revenue				
01-9545-3025 Donations	-\$1,500.00	\$0.00	\$0.00	\$0.00
01-9545-3800 Registration Receipts	-\$6,710.00	-\$6,000.00	\$0.00	-\$5,500.00
01-9545-3805 Gate Receipts	-\$3,834.94	-\$3,500.00	\$0.00	-\$3,000.00
01-9545-3810 Public Swimming Sponsorships	-\$4,425.00	-\$4,500.00	\$0.00	-\$4,000.00
01-9545-3815 Snack Sales	\$0.00	\$0.00	\$0.00	\$0.00
01-9545-3830 Fundraising	\$0.00	\$0.00	\$0.00	\$0.00
01-9545-4900 Provincial Grant	-\$1,960.00	\$0.00	\$0.00	\$0.00
Total Revenue	-\$18,429.94	-\$14,000.00	\$0.00	-\$12,500.00

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	2019 Actual	2020 Budget	2020 Actual	2021 Budget
Expense				
01-9545-7100 Wages	\$28,644.44	\$34,000.00	\$1,398.53	\$34,000.00
01-9545-7200 Benefits	\$3,145.45	\$4,000.00	\$219.01	\$4,000.00
01-9545-7260 Telephone	\$0.00	\$0.00	\$73.32	
01-9545-7261 Advertising	\$115.33	\$150.00	\$0.00	\$150.00
01-9545-7266 Insurance	\$2,435.82	\$2,500.00	\$3,464.34	\$4,000.00
01-9545-7271 Swim Meets - Travel	\$0.00	\$100.00	\$0.00	\$100.00
01-9545-7318 Utilities - Propane	\$1,419.63	\$2,000.00	\$0.00	\$2,000.00
01-9545-7320 Utilities - Hydro	\$2,105.87	\$2,250.00	\$629.34	\$2,250.00
01-9545-7321 Utilities - Water	\$695.00	\$750.00	\$475.00	\$750.00
01-9545-7322 Utilities - Sewer	\$425.00	\$450.00	\$680.00	\$700.00
01-9545-7323 Building - R & M - Services/Supplies	\$1,238.35	\$2,500.00	\$10.09	\$2,500.00
01-9545-7326 Materials & Supplies	\$4,160.89	\$5,000.00	\$0.00	\$5,000.00
01-9545-7354 Health & Safety	\$35.50	\$100.00	\$0.00	\$100.00
01-9545-7511 Association Fees	\$90.00	\$125.00	\$162.50	\$150.00
01-9545-7514 Snacks	\$0.00	\$0.00	\$0.00	\$0.00
Total Expense	\$44,511.28	\$53,925.00	\$7,112.13	\$56,000.00
Dept Excess Revenue Over (Under) Expenditures	\$26,081.34	\$39,925.00	\$7,112.13	\$43,500.00
9554 Fitness / Zumba				
Revenue				
01-9554-3800 Fitness / Zumba Receipts	-\$910.00	-\$4,000.00	-\$840.00	-\$2,500.00
Total Revenue	-\$910.00	-\$4,000.00	-\$840.00	-\$2,500.00
Expense				
01-9554-7100 Wages	\$0.00	\$0.00	\$0.00	\$0.00
01-9554-7261 Advertising	\$0.00	\$0.00	\$0.00	
01-9554-7226 Materials & Supplies	\$0.00	\$0.00	\$0.00	
01-9554-7351 Class Services	\$840.00	\$3,000.00	\$840.00	
01-9554-7514 Equipment	\$0.00	\$0.00	\$0.00	\$0.00
	+ 5100	+ = = = = = = = = = = = = = = = = = = =	+ 5100	+

01-9554-7514 Equipment \$840.00 **Total Expense** Dept Excess Revenue Over (Under) Expenditures

#### 9555 Lucknow Parks

#### Revenue

01-9555-3800 Slo Pitch Receipts	-\$9,000.00	-\$9,000.00	-\$3,190.80	-\$9,000.00
01-9555-3810 Ball Diamond Rentals	-\$10.00	\$0.00	\$0.00	\$0.00
01-9555-3820 Grass Cutting/Maint etc - Recovery	-\$1,000.00	\$0.00	\$0.00	\$0.00
01-9555-4900 Provincial Grant	\$0.00	\$0.00	\$0.00	\$0.00
Total Revenue	-\$10,010.00	-\$9,000.00	-\$3,190.80	-\$9,000.00

\$840.00

\$0.00

\$1,800.00

-\$700.00

\$3,000.00

-\$1,000.00

-\$70.00

Expense

01-9555-7266 Caledonia Ball Diamond & Park	\$8,360.27	\$9,000.00	\$5,547.39	\$9,500.00
01-9555-7267 Kinsmen Ball Diamond & Park	\$9,073.42	\$9,000.00	\$4,504.02	\$9,000.00
01-9555-7268 Kinsmen Soccer Field	\$12,702.63	\$12,000.00	\$10,576.12	\$13,000.00
01-9555-7269 Dungannon Ball Diamonds	\$4,065.96	\$5,000.00	\$1,351.72	\$5,000.00
01-9555-7270 Skate Board Park	\$77.24	\$400.00	\$530.40	\$500.00
Total Expense	\$34,279.52	\$35,400.00	\$22,509.65	\$37,000.00
Dept Excess Revenue Over (Under) Expenditures	\$24,269.52	\$26,400.00	\$19,318.85	\$28,000.00
Total Operating Revenue	-\$295,223.43	-\$282,250.00	-\$146,085.89	-\$152,250.00
Total Operating Expense	\$571,954.91	\$585,325.00	\$394,648.26	\$555,550.00
Operating Budget	\$276,731.48	\$303,075.00	\$248,562.37	\$403,300.00

#### 9560 Capital Projects

01-9560-4900 Transfer From Reserves	-\$3,250.00	\$0.00	\$0.00	\$0.00
01-9560-4900 Gramts/Donations	-\$9,500.00	-\$63,000.00	-\$45,932.25	-\$20,000.00
Total Revenue	-\$12,750.00	-\$63,000.00	-\$45,932.25	-\$20,000.00

	2019 Actual	2020 Budget	2020 Actual	2021 Budget
Expense	\$0.00		\$0.00	
01-9560-7400 Transfer to Reserves	\$0.00		\$0.00	
01-9560-9020 New Office Equipment	\$0.00		\$0.00	
01-9560-9080 New Flooring	\$0.00		\$0.00	
01-9560-9085 New Doors	\$0.00	\$2,500.00	\$2,021.23	
01-9560-9095 Roof Modifications	\$0.00		\$0.00	
01-9560-9120 Sprinkler System	\$0.00	\$7,000.00	\$6,100.51	
01-9560-9125 Surveillance System	\$0.00	\$8,500.00	\$7,244.51	\$3,000.00
01-9560-9130 Pool Solar Blanket	\$0.00		\$0.00	
01-9560-9135 Arena Lighting	\$11,600.00	\$60,000.00	\$49,026.93	
01-9560-9140 Floor Scrubber	\$0.00		\$0.00	
01-9560-9145 Bar Equipment	\$0.00		\$0.00	
01-9560-9150 Compressor Overhaul	\$0.00		\$0.00	
01-9560-9155 Soccer Netting	\$0.00		\$0.00	
01-9560-9160 Snow Blower	\$0.00		\$0.00	
01-9560-9165 Brine Pump	\$0.00		\$0.00	
01-9560-9170 Sand for Pool Filtration System	\$0.00	\$2,500.00	\$1,450.82	
01-9560-9175 Evaporative Condenser	\$0.00		\$0.00	
01-9560-9180 Washroom Renovations	\$0.00	\$35,000.00	\$31,491.05	
01-9560-9190 Pool Liner	\$0.00		\$0.00	
01-9560-9195 Dehumidifiers	\$0.00		\$0.00	
01-9560-9200 Dressing Rooms Washroom Renovations	\$0.00		\$0.00	
01-9560-9205 Pool Cover	\$0.00		\$0.00	
01-9560-9210 Pave Parking Lot	\$0.00		\$0.00	
01-9560-9215 Dump Bucket Float	\$0.00		\$0.00	
01-9560-9220 Storm Water Project	\$0.00		\$0.00	

01 05 60 0005		<b>\$0.00</b>		<b>\$0.00</b>	
	Painting Ice Surface Beams and Purlins	\$0.00		\$0.00	
01-9560-9230	Stonedust for Ball Diamonds	\$0.00		\$0.00	
01-9560-9235	Ice Edger	\$0.00		\$0.00	
01-9560-9240	Website	\$0.00		\$0.00	
01-9560-9245	Tables	\$4,924.30		\$0.00	
01-9560-9250	Stage (Engineer Approved)	\$9,435.90		\$0.00	
01-9560-9255	Ball Diamond Shelters/Upgrades	\$17,750.00		\$0.00	
01-9560-9260	Pool Changeroom Upgrades	\$0.00	\$60,000.00	\$55,158.34	
01-9560-9265	Water Heater (Olympia)	\$10,816.00		\$0.00	
01-9560-9270	Fire Alarm Panel	\$5,692.29		\$0.00	
01-9560-9275	Landscape Trailer	\$0.00		\$0.00	
01-9560-9280	Chain Hoist & Repairs for Overhead Doors	\$0.00	\$2,000.00	\$1,291.05	
01-9560-9285	Lawn Mower	\$0.00	\$18,000.00	\$16,688.64	
	Baseball Diamond Fence	\$0.00			\$8,000.00
	Tractor	\$0.00			\$40,000.00
	Furnace & Water Heater Replacements	\$0.00			\$14,000.00
	Natural Gas Conversion	\$0.00			\$10,000.00
01-9560-9035	Ceiling Tiles	\$0.00			\$5,500.00
	Chairs	\$0.00			\$5,000.00
	Arena & Board Repairs	\$0.00			\$7,500.00
	Elevator	\$0.00			\$1,500.00
Total Expense	2	\$60,218.49	\$195,500.00	\$170,473.08	\$94,500.00
Dept Excess F	Revenue Over (Under) Expenditures	\$47,468.49	\$132,500.00	\$124,540.83	\$74,500.00

#### 9595 Contributions

\$162,099.86	\$217,787.50	\$186,551.60	\$238,900.00
\$162,099.87	\$217,787.50	\$186,551.60	\$238,900.00
2019 Actual	2020 Budget	2020 Actual	2021 Budget
\$324,199.73	\$435,575.00	\$373,103.20	\$477,800.00
\$276,731.48	\$303,075.00	\$248,562.37	\$403,300.00
\$47,468.49	\$132,500.00	\$124,540.83	\$74,500.00
\$632,173.40	\$780,825.00	\$565,121.34	\$650,050.00
\$324,199.97	\$435,575.00	\$373,103.20	\$477,800.00
	\$162,099.87 <b>2019 Actual</b> \$324,199.73 \$276,731.48 \$47,468.49 \$632,173.40	\$162,099.87 \$217,787.50 <b>2019 Actual 2020 Budget</b> \$324,199.73 \$435,575.00 \$276,731.48 \$303,075.00 \$47,468.49 \$132,500.00 \$632,173.40 \$780,825.00	\$162,099.87       \$217,787.50       \$186,551.60 <b>2019 Actual 2020 Budget 2020 Actual</b> \$324,199.73       \$435,575.00       \$373,103.20         \$276,731.48       \$303,075.00       \$248,562.37         \$47,468.49       \$132,500.00       \$124,540.83         \$632,173.40       \$780,825.00       \$565,121.34



#### January 20, 2021

#### MINUTES

The Lucknow & District Joint Recreation Board met on the 20<sup>th</sup> day of January 2021, at 7:00 p.m. through Zoom, an online video conferencing platform.

This meeting is being held electronically as per the Township of Ashfield-Colborne-Wawanosh By-Law #52-2020, Section 3.10 which allows for Electronic Participation of Board Meetings.

#### MEMBERS

Lillian Abbott Jim Hanna Glen McNeil Jennifer Miltenburg Don Murray Anita Snobelen OTHERS	(X) (X) (X) (X) (X) (X)
Steve Bushell, Facility Manager / Recreation Co-ordinator	(X)
Mark Becker, CAO/Deputy-Clerk (Board Secretary)	(X)

#### 1.0 CALL TO ORDER

Mark Becker, Board Secretary, called the meeting to order.

1.1 Election of 2021 Chairperson

#1

As per the terms of the agreement it is the Township of Huron-Kinloss term to hold the chair.

Call for Nominations / Three Times

Board Secretary Mark Becker called for nominations from the floor.

Moved by	Don Murray
Seconded by	Jim Hanna

NOMINATE CHAIR

Carried.

Board Secretary Mark Becker asked Ms. Abbott if she would let their name stand for Chairperson and she indicated she would.

THAT Lillian Abbott be nominated for the 2021 Chairperson.

Board Secretary Mark Becker call for a second, and final third time for nominations from the floor and none were received.

		Moved by Seconded by	Glen McNeil Anita Snobelen	
CLOSE NOMINATIO NS	#2	THAT the nom	inations be closed for the 2021 Chairperson.	Carried.
		Moved by Seconded by	Jennifer Miltenburg Anita Snobelen	
2021 CHAIR	#3	THAT Lillian Al	bbott be appointed as the 2021 Chairperson.	Carried.

The newly appointed Chairperson Lillian Abbott chaired the remainder of the meeting.

#### 2.0 DISCLOSURE OF PECUNIARY INTEREST / POTENTIAL CONFLICT OF INTEREST

None disclosed.

#### 3.0 ADOPTION OF PREVIOUS MEETING MINUTES

3.1 Lucknow & District Joint Recreation Board Minutes – November 18, 2020

	Moved by Jennifer Miltenburg Seconded by Glen McNeil
ADOPTION #4 OF	THAT the Lucknow & District Joint Recreation Board hereby adopts the November 18, 2020 Meeting Minutes as written.
MINUTES	Carried

#### 4.0 DELEGATIONS

No items scheduled.

#### 5.0 REPORT OF THE CHAIRPERSON

No report.

#### 6.0 REPORT OF FACILITY MANAGER / RECREATION CO-ORDINATOR

#### 6.1 Lucknow & District Sports Complex Ice

Due to the provincial lock down, the Lucknow District Sports Complex has been closed to the Public since December 26<sup>th</sup>. With intentions of reopening when permitted to do so, staff has kept the ice in and increased the ice temperature to allow the ice to sit warmer than normally needed for use. Allowing the ice to sit warmer than normal operating temperature means the refrigeration plant runs much less and reduces energy costs. Currently the refrigeration plant runs approximately once a day for an hour (less if it is colder outside) and, uses approximately 120 - 150 kWh per day. Based on this, operating the refrigeration plant as we have since the lockdown was implemented, the energy costs to operate the refrigeration plant will be approximately \$350 to \$500 from mid-January to February 11<sup>th</sup>. Before the Provincial lock down, the refrigeration plant used approximately 450 to 500 kWh per day.

Minor Hockey as well as the Men's Recreational Hockey League and Port Albert Old Timers are committed to use the ice from Feb 11<sup>th</sup> to March 31<sup>st</sup>, if government regulations with respect to COVID19, allows for hockey to continue.

Staff recommends keeping the ice in with the current cost saving mitigations implemented.

STAFF COMMENTS: We seek your direction.

ACTION: The Board agreed, in light of the health and safety of everyone due to the pandemic, that the Ice will be removed. The following resolution was adopted.

		Moved by Seconded by	Glen McNeil Anita Snobelen	
REMOVE ICE	#5		now & District Joint Recreation Board hereby agre	es to
				Carried.

#### 6.2 Canada Summer Jobs Grant 2020

As the Board may recall from the February 2020 Board meeting, staff completed the Canada Summer Jobs Grant application for funding towards the Pool Supervisor, 3 Lifeguards, Parks and Rec Summer Student, and Day Camp Leader positions. Due to Covid-19, these positions were put on hold, as well as any funds from the Canada Summer Jobs program. At that time, staff indicated that should funds become available, we would be interested in re-visiting.

In mid-October, Canada Summer Jobs reached out to confirm the continued interest. As most of the positions are summer positions, staff looked into the possibility of changing the positions. Canada Summer Jobs noted that if approved for the original application submitted in February, applicants would have the opportunity to modify the positions, as long as they still meet the criteria listed.

Canada Summer Jobs 2020 has approved the funding request, and staff was able to modify the positions to cover 3 Arena Student at 10 hours per week until the end of February. Due to the Provincial shut down, staff is again working with Canada Summer Jobs 2020 to see how this will affect the funding and determine the best course of action regarding the grant.

STAFF COMMENTS: For your information purposes.

ACTION: Noted.

6.3 Canada Summer Jobs Grant 2021

The Canada Summer Jobs Grant application process opened in late December and staff has completed applications for the same positions applied for in 2020. Additionally, and new for this year, Canada Summer Jobs Grant will be available for positions running through to February 26<sup>th</sup> of 2022 and staff has applied for funding for Arena Students from October to February 26<sup>th</sup>.

STAFF COMMENTS: For your information purposes.

ACTION: Noted.

6.4 OTF Grant – Update

Earlier in the year the Pool and Gym received washroom and accessibility upgrades with the assistance of a \$50,000 Ontario Trillium Foundation Grant.

Due to Covid-19, the final steps in completing the requirements of the grant were put on hold as recognition ceremonies could not be completed. As recognition ceremonies are still not able to be held, recognition through a media release is now acceptable. Staff is in the process of working with the communications advisor to complete this step and finish the requirements of the grant.

STAFF COMMENTS: For your information purposes.

ACTION: Noted.

6.5 5 Year Equipment Replacement Plan

We have provided the Board with a copy of the 5-year equipment replacement plan.

STAFF COMMENTS: For your information purposes.

ACTION: It was agreed that the Facility Manager will amend the 5-year equipment replacement plan as a result of changes made to the Draft 2021 Budget, and furthermore in the hopes to attempt to evenly spread out the replacement costs over the years.

6.6 Room Rental Rates

In reviewing the Room Rental Rates for the Lucknow and District Sports Complex, staff notes that the per day rental is not sufficient for rentals lasting longer than 8 or 9 hours. When a user group rents an area such as the arena floor for 8 hours, one staff member can work the entire shift, and the rental fee is offset by \$115.00. If the same rental was to last for 12 hours, a second shift would be required, and the rental fee would be offset by \$315.00

Staff recommends that for a rental lasting longer than 8 hours, the user be charged the applicable daily rate, plus the corresponding hourly rate for any additional hours. Staff has provided a section of the rental pricing chart below as well as the proposed section to reflect this recommendation. Please note these rates are plus H.S.T.

Current.	
Arena Floor (Per Hour)	\$50.00
Arena Floor (Per Day)	\$285.00
Dave Farrish Room Meeting (Per Hour)	\$25.00
Dave Farrish Room Meeting (Per Day)	\$130.00
Dave Farrish Room Meeting - Apr 1 to Sept 30 After 4:00	
pm and Weekends (Per Hour)	\$50.00
Dave Farrish Room Meeting - Apr 1 to Sept 30 After 4:00	
pm and Weekends (Per Day)	\$200.00
Henderson Hall (Per Hour)	\$25.00
Kitchen (Per Use)	\$30.00
Henderson Hall & Kitchen (Per Day)	\$150.00
Henderson Hall - Apr 1 to Sept 30 After 4:00 pm and	\$50.00
Weekends (Per Hour)	
Henderson Hall and Kitchen - Apr 1 to Sept 30 After 4:00	\$225.00
pm and Weekends (Per Day)	

#### Current:

#### **Proposed:**

\$50.00
\$285.00
Daily rate plus hourly rate for
additional hours
\$25.00
\$130.00
\$50.00
\$200.00
Applicable daily rate plus hourly
rate for additional hours
\$25.00
\$30.00
\$150.00
\$50.00
\$225.00
Applicable daily rate plus hourly
rate for additional hours

STAFF COMMENTS: We seek your direction.

Moved by

ACTION: The Board agreed with the staff recommendations, and agreed to adopt the following resolution.

		Seconded by Don Murray
AMEND ROOM RENTAL RATES	#6	THAT the Lucknow & District Joint Recreation Board hereby agrees to amend the Room Rental Fees after 8 hours to <i>"applicable daily rate plus hourly rate for additional hours"</i> for the Henderson Hall, Dave Farrish Room, and the Arena Floor.

lim ∐anna

Carried.

#### 6.7 2021 Proposed Draft Budget

We have provided the Board with a copy of the proposed draft 2021 Budget for the Lucknow & District Joint Recreation Board as well as a summary of the effect Covid-19 has had on the 2020 and the 2021 Budgets. Staff reviewed the budget in more detail at our meeting with discussion and possible revisions.

We have also included a list of Capital Project recommendations in the 2021 Proposed Draft Budget. The Capital Project recommendations include the following:

#### Extending 10' High Fence at Caledonia Baseball Diamond for Spectator Safety:

With the addition of the dugouts at the Caledonia Baseball Diamond, the spectator seating needed to be moved further down the baselines for spectators to see the Baseball Diamond. With the spectator seating further down the baseline, the risk of a spectator being hit with a foul line drive has dramatically increased. To fix this safety concern the current 5' fence needs to be increased to 10' fencing from the end of the dugouts to the edge of infield. This will stop foul line drives from exiting the Baseball Diamond and hitting a spectator.

#### **Tractor Replacement:**

The tractor is nearing its recommended and planned replacement date. The estimated preventative maintenance costs for 2021 including engine, hydraulic, and axle oil changes, coolant flushing, filter replacements, and other services required will be around \$750 plus labour. The estimated trade in value will also be reduced by approximately \$1,000 after another year of use and additional unexpected repairs may be required in this time. The current tractor has 2000 hours on it, and is showing definite signs of its age and will most likely require some additional maintenance. The hydraulic lines that control the loader are cracking and will need replaced as well as some hydraulic couplers will likely need to be replaced. The loader quick attach will also need repairs as it is starting to bend again making attaching the bucket or pallet forks very difficult.

#### Furnaces & Water Heater Replacement as well as addition of Water Heater Timers:

As noted in the Equipment replacement plan, there are furnaces and water heaters in use that were installed in 1995 when the Lucknow & District Sports Complex was built and rather than replacing everything on an emergency basis it would a better approach to replace these appliances before they break down. Updating the furnaces and water heaters to more energy efficient units and adding timers to the water heaters will help reduce energy costs.

**Ceiling Tiles in the Dave Farrish Champions Chamber a Recreation Department Office:** After sitting in place since 1995, the ceiling tiles in the Dave Farrish Champions Chamber and Recreation Department Office have bowed, somewhat discolored and are becoming an eye soar. The Dave Farrish Champions Chamber is used by many different groups and members of the public and anyone sitting in the room for an extended period of time would begin to notice the ceiling. There is new bright lighting throughout the room, shiny floors, and an old ceiling. Painting the ceiling tile track white instead of the old yellow/cream colour and upgrading the ceiling tiles to white 2'x2' tiles would greatly improve the appearance of this busy room. As is with the Dave Farrish Champions Chambers, the Recreation Department Office and Tourism Office ceiling is in the same situation. Especially in the summer months, the Recreation Department Office and Tourism Office is an area that has a wide range of visitors, many of which never see the rest of the facility. Painting the ceiling track and replacing the ceiling tiles in the Recreation Department Office will give a much cleaner and welcoming first impression to visitors.

#### Chairs and Cart for the Dave Farrish Champions Chamber:

Many chairs in the Dave Farrish Champions Chamber have been repaired over the years and are in need of repair again, or are beyond repair. Additionally, the current chairs in use for the room are large and do not stack well, causing them to fall over if a rental group stacks the chairs more than 4 chairs high. As the chairs are rather bulky to begin with, they take up a lot of space and clutter the room. New chairs with a chair dolly/cart would help to keep the room more organized, free up floor space when not all chairs or tables are in use and ensure that stacked chairs do not pose a hazard to anyone using the room.

#### Additional Security Cameras for the Lucknow & District Sports Complex:

In 2020, security cameras were installed around the Lucknow & District Sports Complex. There are still a few areas that cameras would prove beneficial. These additional cameras would ensure that all entrances/exits are monitored. As well as some other high traffic areas.

#### Arena Board Repairs:

The arena boards along the lobby have become loose and are in need of repair. The ice surface side of the boards are still safe for use, but between the boards and lobby wall will require attention before becoming a more serious issue.

#### Elevator/Lift Hose, Battery and Buttons:

The lift hoses, battery and buttons are due to be replaced as they are only able to be in service for 5 years.

STAFF COMMENTS: We seek your direction.

Moved by

ر مالم،

ACTION: The Board agreed to have staff make some changes, and look into some alternative ideas for consideration by the Facility Manager. The Draft 2021 Budget will be deferred to the February 2021 Meeting for a further review and consideration.

The Board however gave pre-budget approval to proceed with the Ceiling Tiles being replaced in the amount of \$5,500.

		Moved by Seconded by	Don Murray Jennifer Miltenburg
INSTALL CEILING TILE	#7		now & District Joint Recreation Board hereby agrees to approval for the replacement of ceiling tiles in the amount
		- + -,	Carried.

#### 7.0 ACCOUNTS

7.1 Revenue/Expenditure Report

	Moved by Seconded by	Jennifer Miltenburg Anita Snobelen	
REVENUE/ #8 EXPENDITURE REPORT		now & District Joint Recreation Board hereby acc Expenditure Report as written.	cepts Carried.
7.2 November 2020 Che	que Listing		

		Seconded by Jini Hanna
CHEQUE LISTING	#9	THAT the Lucknow & District Joint Recreation Board hereby accepts the November 2020 cheque listing as presented in the total amount of \$ 39,487.06.

Jennifer Miltenburg

Carried.

7.3 December 2020 Cheque Listing

		,	Don Murray Jennifer Miltenburg
CHEQUE LISTING	#10		now & District Joint Recreation Board hereby accepts 2020 cheque listing as presented in the total amount of

Carried.

#### 8.0 OTHER BUSINESS

No items scheduled.

#### 9.0 IN-CAMERA / CLOSED SESSION

No items scheduled.

#### 10.0 ADJOURNMENT

Moved by	Jennifer Miltenburg	
Seconded by	Anita Snobelen	

ADJOURN #11 THAT the Lucknow and District Joint Recreation Board do now adjourn to meet again on February 17, 2021 at 7:00 p.m. or at the Call of the Chairperson.

Carried.

Chair, Lillian Abbott

Secretary, Mark Becker

#### **DCA Meeting Minutes**

Date: October 20, 2020 Start Time: 7:30pm; at Seniors Hall Present: Ken L, Jennifer M, Kathleen H, Jane H, Susanne, Angela B Absent:

Approval of Agenda

- Agenda was reviewed and approved by all to proceed with one addition.

Review Minutes of the previous meetings from September 22, 2020

- Motion by Angela to accept and seconded by Jane, all in favour.

Business arising from previous minutes

- Jane prepared a thank-you letter to be sent to the Township, with regards to the Township's work in park. It was reviewed and we agreed on the edits to the letter at the meeting.
- Flier prepared by Susanne that is to be sent to the public about the park project was reviewed and approved at this meeting. A motion to accept by Susanne and second Agnela, all in favour.
- Billboard was mounted in the park by Ken, Bob and Brian
- Ken agreed to prepare a letter to be sent to business' requesting donations.

#### Update From Council

- We submitted an application for the New Horizons Senior's Program was submitted on October 19<sup>th</sup>.

#### New Business

- It was discussed that we have to prepare a letter with the funding request documents to be sent to the Township. Those in attendance were assigned a community group to get their grant request letters prepared and submitted.

Next Meeting Date

- Proposed for November 30, 2020
- Motion to adjourn by Angela.

Minutes prepared by Ken Logtenberg

#### **DCA MEETING**

#### **NOVEMBER 30<sup>TH</sup>, 2020**

#### MINUTES

PRESENT: Ken L, Jenn M, Jane H, Kathleen H, Ang B, Susanne C

ABSENT: Maureen W

The meeting was held at the Seniors Hall and called to order at 6:35p.m.

The minutes were read from the last meeting dated October 20<sup>th</sup>, 2020. They were approved by Ken and accepted by Ang.

Jenn gave the ACW update, mostly about the grants and the current grant we are applying for 'Trillium Roots' which has been submitted, but is not complete yet at this time. Jenn will fix what needs to be fixed and resubmit.

The next grant is the 'Inclusive Community Grant' and Jenn asked us all to participate in determining some numbers required for the grant. This grant is similar to the New Horizons for Seniors grant, and will require a budget attached. We are updating the quote on the gazebo, and getting a quote on the cement sidewalks and parking lot, including a foundation for the cenotaph, and electrical to accompany this grant.

Susanne will take care of the gazebo, and Ken will look after the cement and electrical. The deadline for these quotes to be received by Jenn is December 9<sup>th</sup>.

Susanne reported that the flyers were mailed, the sign is up and some trees were planted. Donations are also being received, and Susanne will talk to Ellen at ACW to get an update.

Jenn also reported that she will address council on the Kiosk installed at the park, which still needs some minor work and a sign.

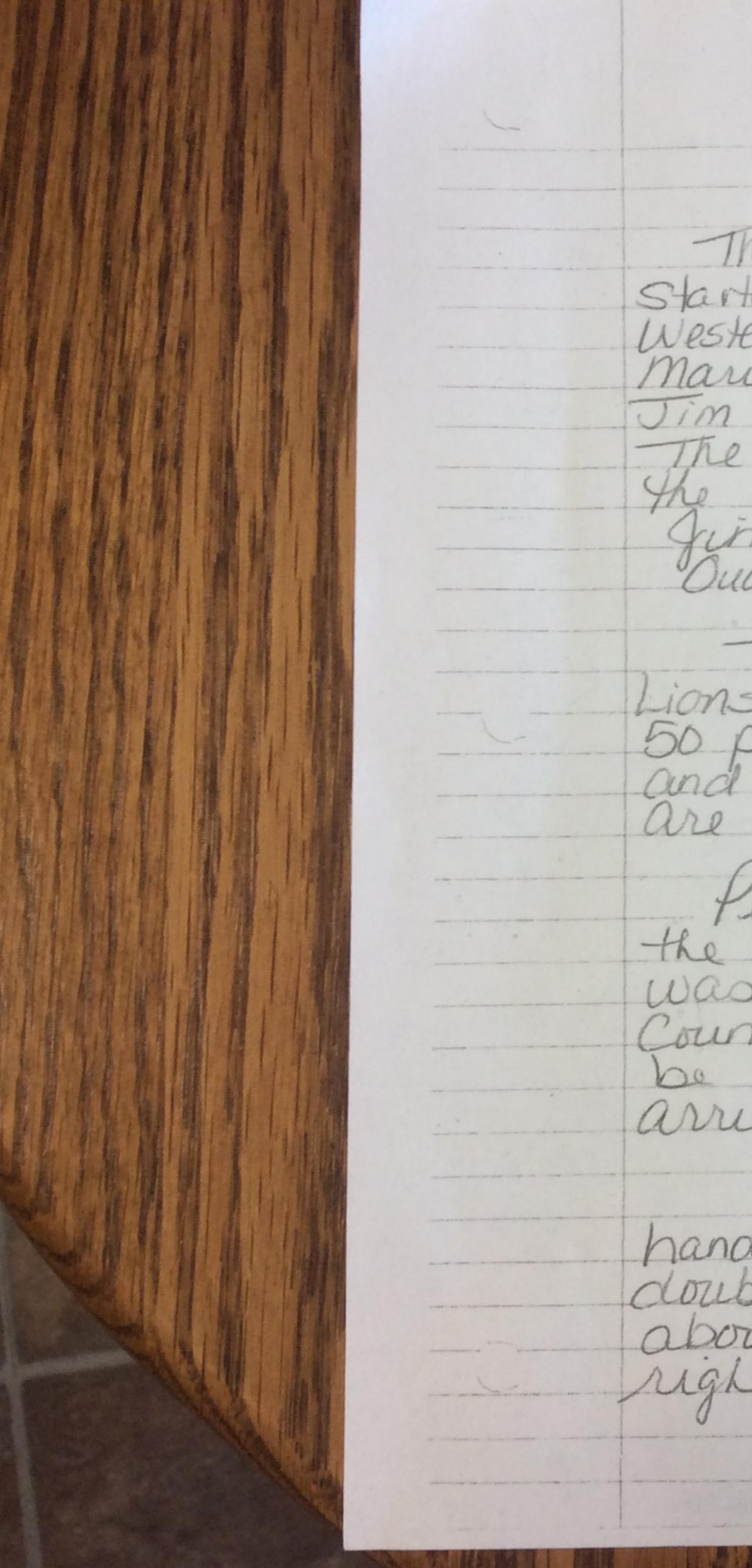
Kathleen reported that Brian Stothers has been approached for the work on the cenotaph, which will begin in the spring. It was mentioned that a fairly decent, sturdy foundation be installed so Brian can do his work. Ken will get a quote on this when he does the sidewalk and parking lot.

Jane reported that she will have the YOUth access their funds being held by the church (\$2000) and donate to ACW to be used for the Gaga Pit.

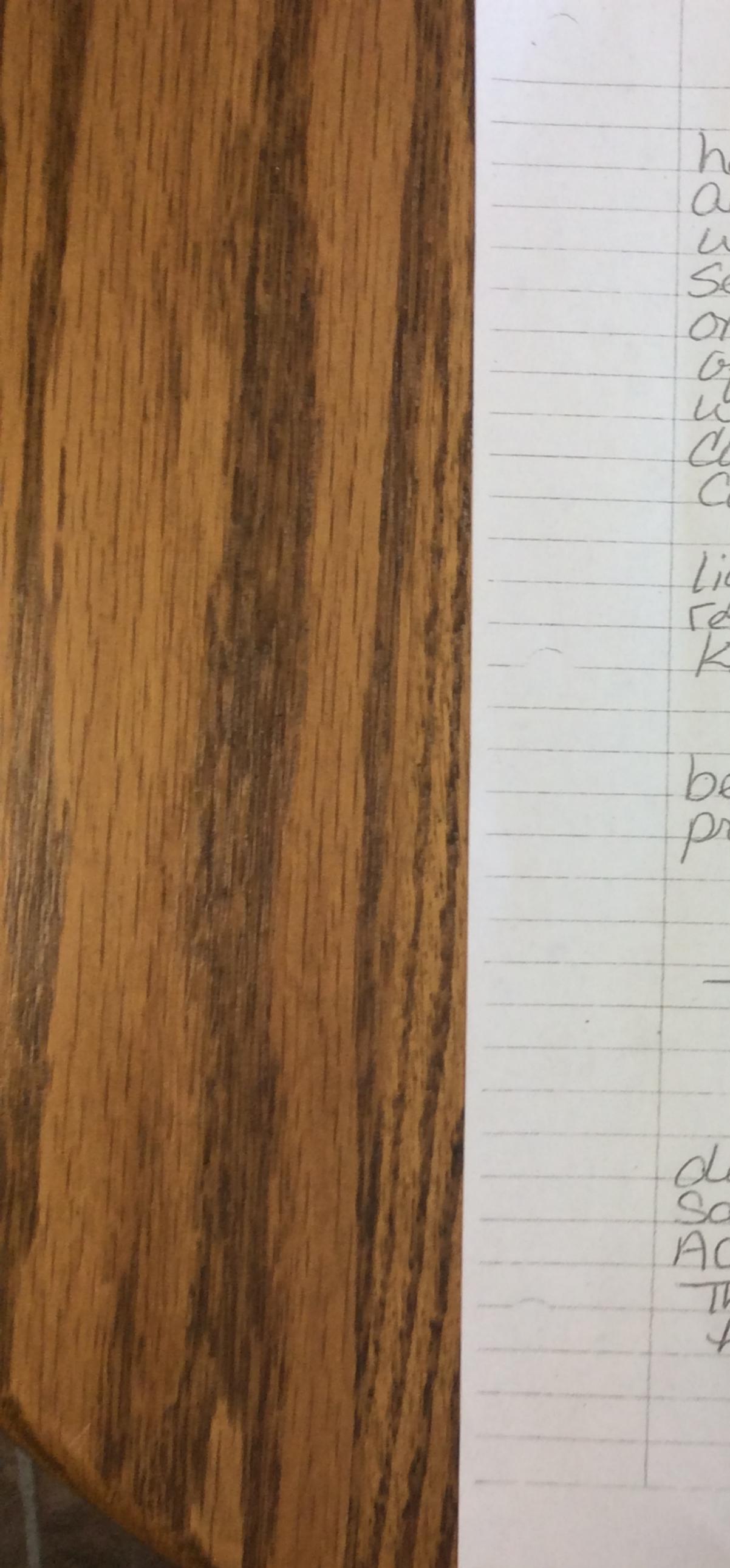
Ken reported he will finish the sponsorship letter for businesses this week. A list of businesses and person looking after the request will be in a separate attachment.

Budget deliberations for ACW are in the near future, and we will submit all Dungannon Community requests in one package for ACW in December. Jane has the Seniors letter done, Susanne the Pro Rodeo, and the other groups will be notified of the December deadline. Jane will do a cover letter for these requests. These letters must be emailed to the DCA for committee approval before sending on to ACW. The DCA will also be putting forth a request for the park.

The meeting was adjourned at 8:30pm by Ken, seconded by Jane.

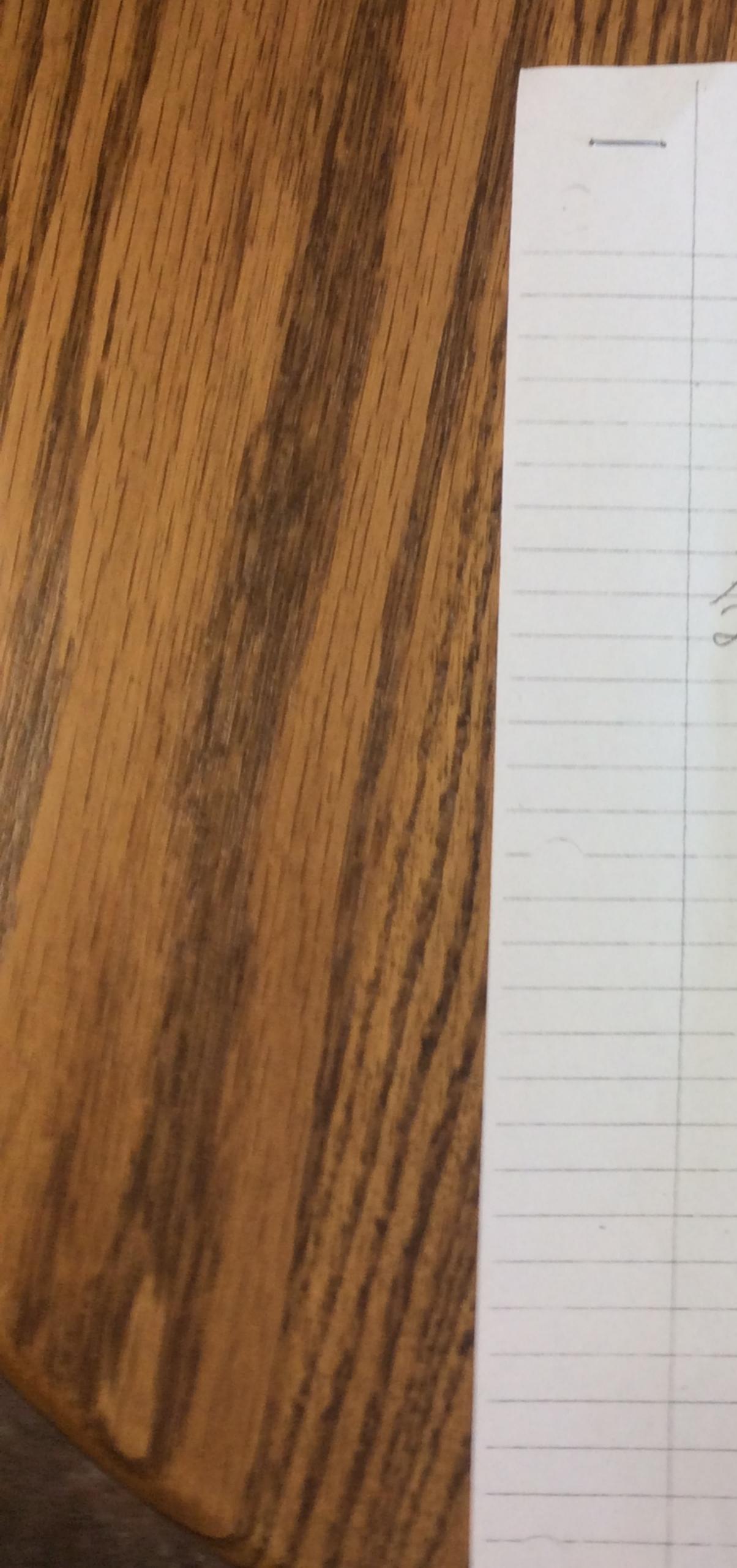


Thurs. Nov26/2 The Auburn Wall Board Meeting Started at 7: dopm with Alex Westerhout, Bill Vanstone, Peter Marita Oudshoom, Sandra, Popp Jim Glousher v Patty Looke plesent. The minutes were read from The last meeting accepted by Jim Glousher, and by Peter Oudshoom Carried The only thing running is the ions Club. As of 1100 23 only 50 people allowed at a function, and 10 people for meetings. Rules are changing daily Peter Gudspoorn explained about the fund raising the kions Club was doing by selling. The Country Breakfast. Orders need to be it by Dec 12020 and arrives on Dec 15 2020 There is a new toilet in the handicap washroom. Alex will double thack with Steve Duizer about a higher toilet to bring the right one.



Steve Duizer was over to the hall in Sept to drop off Supplies and noticed the furnace wasn't working. We called a place from Seaforth to fix it. They had to order the part in took a couple of days to come, but the firmace Was fixed. Patty had Sparlings coming to service it but she cancelled them. Wondering if there could be a light in the window of themometer reader or an alarm to let us Know its not working better in the village. Police presence is better. Thursday Teb J18 2021. T. Opm. Snow Removal in the village is done by Roost Sanding + Salting in the village is done by ACW , Central Ituron ; They alternate doing 'in . The streets in the village.





3. Alex called the meeting adjorned. Next meeting Thursday 76 18 2021 Accepted by Bill Vanstone Ind by Marita Oudshoorn .



Date: To: Subject:

I WBellow

Nex Westerhout" <Alex. Westerhout@centralhuron.com> bursday, February 18, 2021 5:17 PM newesterhout@tcc.on.ca> **RE** Auburn Hall Expenses

# Hi Councillor Westerhout,

The MCH wages are \$5,941.19 for building maintenance and the Auburn Hall Secretary wages are \$571.34.

I had sent a blurb from Steve Duizer in a previous email regarding the wages. I'll add it here for your ease of reference.

"Wages and benefits include not only the typical custodian and administration costs (Sandra Popp and Patty Cooke), but also some Central Huron labour to perform various kitchen and bathroom updates. These include kitchen cabinet repair and painting and toilet upgrades. The building maintenance costs included the material needed for these projects. The contracted services included the contractor costs for the main hall painting, an LED yard light upgrade and a necessary furnace repair.

I've conied Steve in so he can comment on what

7 64%

## **Revenue:**

\*\*

Auburn Ha Donations A.C.W. Cor TOTAL RE

Expenses:

Wages and Communica Insurance Materials & **Building Ma** Utilities Fleet/Equip Contracted TOTAL EXI

NET SURPL

AM

71.80% CH 28.20% ACW

INCREASE IN KENTAL - 510

## **Auburn Hall Operating Statement** as at December 31, 2020

	19-Jan-21 2020 Actual		
all Rentals	1,610.60 \$		
evenue	- \$ 4,349.71 \$ <b>\$ 5,960.31 \$</b>		
d Benefits	6,512.53		
ations	853.74		
Supplies	497.23		
aintenance	145.46 1,756.68		
annonanoc	3,205.83		
oment Usage	433.92		
Services	3,629.70		
PENSES	\$ 17,035.09 \$		
LUS/(DEFICIT)	\$ (11,074.78) \$		

OUNT TO BE COVERE	D BY RESPECTIVE MUNICIPALITY

2020		
\$	15,424.49	\$
\$	(11,074.78)	S
\$	(4,349.71)	\$

1/19/2021 19:53

1

T:\R - Recreation and Culture\Recreation and Facilities from M Drive Finance\Auburn Hall\2020\Auburn Hall Income Statement 2020

2020 Budget

2021

2400,00

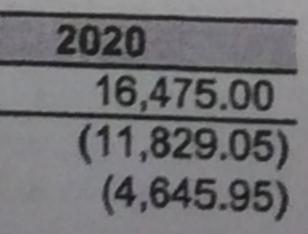
4,800.00 4,287.00 9,087.00

5,400.00 900.00 575.00 1,000.00 3,000.00 5,000.00 1,600.00 3,800.00 21,275.00

6500.00
900.00 575.00 500.00 3000.00 5000.00
1000.00
3800.00

Page 1

(12,188.00)



#### Huron County BR+E Project

#### Economic Development Department

#### **Project Introduction**

The Huron County Business Retention and Expansion (BR+E) project is a county-wide effort that emphasizes personal business visits as a way to identify the needs of the existing businesses of Huron County. Specifically, the objectives of the project are to:

1. Identify the needs, concerns, and opportunities of existing local businesses in order that, where appropriate, local action can be taken to respond to the businesses' needs or development opportunities.

2. Learn of the future plans of the area's local businesses with respect to expansion, relocation, and/or retention and assess where assistance can be provided.

3. Demonstrate the community's pro-business attitude and develop an effective means of communication with local businesses.

The BR+E survey will indicate the future plans and needs of local businesses and how businesses view the community as a place to do business. In turn, this survey information will be used to plan future economic development activities for Huron County moving forward.

The Huron County BR+E Project is four-stage process:

- 1. Project Preparation
- 2. Data Collection & Analysis: May October, 2021
- 3. Develop Goals & Action Plan
- 4. Implement Action Plan

#### **Volunteerism**

Volunteers are the heart of a BR+E project, as they represent the project to the business community. The role of a BR+E Volunteer is to conduct business visits, collecting information that will help identify immediate issues and opportunities. This information will be used as the basis to formulate strategies for the retention and expansion of existing businesses and workforce, thereby strengthening the local economy and community.

I have provided a volunteer one-pager document (attached) that outlines details of the Volunteer role, along with a short slide deck presenting information on the project and volunteer aspect.

We are extending a request to active members of your community/staff who may be interested in showing their support for the local business community to join our Huron County BR+E Volunteer Force. We would also like to encourage business owners and managers to volunteer their time as an interviewee so we can gain valuable insight and knowledge on their current situation, and act on their needs. I have provided my contact details below for those interested in volunteering or are curious to learn more.

Thank you!

Contact: Cole Nicholson - BR+E Coordinator Email: <u>cnicholson@huroncounty.ca</u> C: 519-525-7315



#### ECONOMIC DEVELOPMENT DEPARTMENT

Address: 57 Napier St. Goderich, Ontario N7A 1W2 Phone: (519) 524-8394, Ext 6 Email: economicdevelopment@huroncounty.ca Website: ecdev.huroncounty.ca

### Huron County Business

## **Retention & Expansion Project**



#### ECONOMIC DEVELOPMENT DEPARTMENT

Address: 57 Napier St. Goderich, Ontario N7A 1W2 Phone: (519) 524-8394, Ext 6 Email: economicdevelopment@huroncounty.ca Website: ecdev.huroncounty.ca

#### Volunteer Job Description

#### Purpose

- To conduct business visits for the BR+E project, collecting information that will help identify immediate issues and opportunities on an individual and regional basis.
- This information will be used as the basis to formulate strategies for the retention and expansion of existing businesses and local workforce in Huron County, thereby strengthening the local economy and community.

#### Specific Tasks, Duties, and Responsibilities

- Schedule and conduct business interviews as assigned
- Return the completed surveys to BR+E Coordinator
- Maintain confidentiality and sign confidentiality contract

#### Qualifications and Skills Required

- Enthusiasm and reliability
- Professionalism, representing the community for the BR+E project
- Good listening and recording skills
- Able to respect and exercise confidentiality

#### Benefits and Rewards

- Build networks and learn about local economy
- Support business community by identifying regional/sector issues, allowing for more informed government decisions
- Contribute directly to a County-wide business community improvement initiative
- Gain personal and professional experience by participating in BR+E visitations

#### **Results Expected**

- Shortly after training, volunteers will contact assigned business owners to begin outreach in geographic groupings
- Business information will be gathered
- Completed surveys will be returned by predetermined date

#### Relationships and Reporting

- Report any questions/concerns/comments re: the interview process to BR+E Coordinator
- Promptly report any urgent business issues to BR+E Coordinator
- Information gained in the interview process is to be treated as confidential and solely for the use of the BR+E project

#### Time Commitment

- Mandatory attendance at a training session approximately 2–3 hours
- Survey conducting will take place from May to November, 2021
- Each interview takes approximately 1 hour

Contact: Cole Nicholson - BR+E Coordinator Email: <u>cnicholson@huroncounty.ca</u> C: 519-525-7315

#### Dear Council,

I understand that council is currently working on a more progressive approach to communicating with the residents in ACW.

I would like to request that council also consider providing a live stream video of council meetings for those residents that are unable to attend in person, as part of your communication strategy. I will state the obvious –many cannot attend the meetings during daytime hours. Since the meetings have went to zoom due to the pandemic, there are even more obstacles such as technical difficulties and poor connections (or no connection whatsoever).

Communication and inclusiveness are important to residents, and although everyone may not be able to provide their input during a meeting, they can still see how decisions were made. YouTube is one viable format that other municipalities are using so people can watch the meeting live after it has happened. There are others, of course, that could be researched.

Please consider this as an option going forward.

Sincerely,

Susanne Cutting

## AMO Annual Conference Updates

February 13, 2021



#### AMO 2021 Virtual Conference - Registration Open

Hosted by the City of London, August 15 - 18, for reasons all too apparent, AMO's 2021 Annual General Meeting and Conference will be virtual again and appearing once again on a screen near you.

While there is no substitute for getting together in person, there is still important work to be done in August 2021. The planning committee is preparing a program that includes all the important components: Ministers' Forums, keynote speakers, concurrent sessions, and networking opportunities.

You can also expect to hear from provincial political leaders and have the opportunity to attend delegation meetings.

Registration is open, and early bird rates apply until April 30, 2021.

To register, click here.

\*Disclaimer: The Association of Municipalities of Ontario (AMO) is unable to provide any warranty regarding the accuracy or completeness of thirdparty submissions. Distribution of these items does not imply an endorsement of the views, information or services mentioned.



Please consider the environment before printing this.

Association of Municipalities of Ontario 200 University Ave. Suite 801,Toronto ON Canada M5H 3C6 Wish to Opt Out of AMO Conference Communications ? <u>Click Here</u>

## H higher logic

## AMO VIRTUAL 2021 CONFERENCE AND AGM REGISTRATION

## WEBSITE MAINTENANCE NOTICE

AMO will be performing our scheduled website maintenance on February 18, 2021 starting 5 pm - 8 pm for approximately 3 hours during which time our site will be unavailable. The website should be back up by 4 pm.

## DELEGATE VIRTUAL PACKAGE: FULL CONFERENCE

This package includes:

- Access to all scheduled conference educational programming on Monday, Tuesday and Wednesday
- Access to all scheduled conference networking events
- Access to delegation meetings with the Province
- Access to view all the presentations post-Conference for 30 days

## DELEGATE VIRTUAL PACKAGE: FULL CONFERENCE RATES

	Early Diru	Regular			
1	1				
	until Friday, April				
	<i>30, 2021 at 4:00</i>				
	PM.				
Member:	\$600.00	\$675.00			
Non-Member:	\$750.00	\$850.00			
*Non-					
Member	\$400.00	\$400.00			
Students:					

Early Bird

Regular

\* Please note that individual registrations provide access to the virtual conference for the registrant only.

\* To be eligible for a non member student rate, a valid student identification card must be provided at the time of registration. The student rate is open to full-time secondary and post-secondary students.

## PLEASE NOTE

- A confirmation notice will be sent to the DELEGATE e-mail for all registration, modifications or cancellations. Review your confirmation carefully for accuracy.
- Payments by cheque must be postmarked before April 30, 2021 in order to receive early bird pricing. Registrations received after April 30, 2021 at 4:00 pm will be processed at the regular rate.
- All cancellations must be submitted in writing to the Association of Municipalities of Ontario via email at events@amo.on.ca. Cancellations received prior to 4:00 pm ET, July 5, 2021 will be eligible for a refund less \$95.00 (plus HST) for members and \$120.00 (plus HST) for non-members administration fee. Cancellations made after 4:00 pm are non-refundable. An alternate attendee name may be substituted at any time.
- Registration forms that are not complete will not be processed, please ensure the details you have provided are correct and complete.
- Registration inquiries can be directed to events@amo.on.ca or by calling 416.971.9856 x 315.
- > Registration

### **REGISTER ONLINE**

If you require a login to register online, please email amo@amo.on.ca



#### THE CORPORATION OF THE TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH

#### **BY-LAW NUMBER 19-2021**

**BEING A BY-LAW** to confirm the proceedings of the Corporation of the Township of Ashfield-Colborne-Wawanosh at its meeting held on March 2, 2021.

**WHEREAS** Section 5(3) of the Municipal Act, 2001, S.O. 2001, Chapter 23 as amended, requires that a municipal Council to exercise its powers by By-Law;

**AND WHEREAS** Council, or a Committee of Council often authorizes actions to be taken which does not lend itself to an individual By-Law;

**AND WHEREAS** it is deemed expedient to confirm the proceedings of Council at its meeting hereinafter set out;

**NOW THEREFORE** the Council of the Corporation of the Township of Ashfield-Colborne-Wawanosh enacts as follows:

- The actions of the Council of the Corporation of the Township of Ashfield-Colborne-Wawanosh at its meeting held on the 2<sup>nd</sup> day of March with respect to each motion, resolution and other action passed and taken by Council at its meeting, is hereby adopted and confirmed as if all such proceedings were expressly embodied in this By-Law.
- 2. The Mayor and Clerk are authorized and directed to do all the things necessary to give effect to the actions of the Council referred to in the preceding section hereof.
- 3. The Mayor and the Clerk are authorized and directed to execute all documents necessary in that behalf and to affix thereto the seal of the Corporation.

Read a first and second time this 2<sup>nd</sup> day of March 2021.

Read a third time and finally passed this 2<sup>nd</sup> day of March 2021.

Mayor, Glen McNeil

CAO/Deputy Clerk, Mark Becker