DRINKING WATER SOURCE PROTECTION
ACT FOR CLEAN WATER

TRENT CONSERVATION COALITION
SOURCE PROTECTION REGION

Approved

Trent Assessment Report

Approved October 1, 2014
Effective January 1, 2015
Updated August 18, 2020

Volume 2 of 3
(Appendices)

Trent Source Protection Areas:
Crowe Valley Source Protection Area
Kawartha-Haliburton Source Protection Area
Lower Trent Source Protection Area
Otonabee-Peterborough Source Protection Area

Ontario

Made possible through the support
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www.trentsourceprotection.on.ca

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VARIANCES FROM TECHNICAL RULES & TERMS OF REFERENCE

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Ministry of
the Environment

Source Protection Programs
Branch

8th Floor
2 St. Clair Ave. West
Toronto ON M4V 1L5

Ministère de
l'Environnement

Direction des programmes de protection
des sources

8e étage
2, avenue St. Clair Ouest
Toronto (Ontario) M4V 1L5

Ontario

Log: ENV1283MC-2010-177

July 8, 2010

Mr. James T. Hunt
Chair, Trent Conservation Coalition Source Protection Committee
c/o Lower Trent Conservation
714 Murray Street, RR 1
Trenton ON K8V 5P4

Dear Mr. Hunt:

Thank you for your letter of June 11, 2010, in which you requested a second formal extension to the due date for the submission of your five assessment reports for the Kawartha-Haliburton, Otonabee-Peterborough, Crowe Valley, Ganaraska, and Lower Trent source protection areas from August 30, 2010 to October 29, 2010.

I understand that this extension is being requested to allow sufficient time to complete the consultation requirements for all 5 reports, incorporate the comments to revise and edit the documents for the second posting and then compile the comments and submit the reports to the ministry. I am also aware that this extension is being requested in order for the committee and its Source Protection Authorities to complete the assessment reports.

I have reviewed the rationale provided in your letter and the updated workplan to complete the assessment reports. Based on the information provided, I am granting you and the Trent Conservation Coalition Source Protection Committee an extension to the due dates of your five assessment reports to October 29, 2010.

Despite granting this extension, I encourage you and your committee to review the proposed schedule for the completion of the assessment reports and gain some additional efficiency where possible in order to potentially submit the reports prior to the legislated October 29, 2010 date.

RECEIVED
JUL 12 2010

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I appreciate the amount of hard work the Trent Conservation Coalition Source Protection Committee and the five Source Protection Authorities are doing to ensure that the assessment reports are completed in an efficient and timely manner. I would expect that this high level of effort would continue in order to complete the prescribed work by your new due date of October 29, 2010.

I assure you that the ministry will continue to do everything it can to support source protection committees and authorities in achieving the compliance dates.

Sincerely,

Ian Smith, Director
Source Protection Programs Branch
Ministry of the Environment

c: Jim Harrison, Chair, Lower Trent Source Protection Authority
Larry O'Connor, Chair, Kawartha-Haliburton Source Protection Authority
Suzanne Partridge, Chair, Crowe Valley Source Protection Authority
Brian Fallis, Chair, Ganaraska Region Source Protection Authority
Terry Low, Chair, Otonabee-Peterborough Source Protection Authority
Glenda Rodgers, Project Manager TCC Source Protection Region
Keith Willson, Manager, Source Protection Approvals
Wendy Lavender, Liaison Officer, Source Protection Implementation

Ministry of
the Environment

Source Protection Programs
Branch

8th Floor
2 St. Clair Ave. West
Toronto ON M4V 1L5

Ministère de
l'Environnement

Direction des programmes de protection
des sources

8e étage
2, avenue St. Clair Ouest
Toronto (Ontario) M4V 1L5

Ontario

Log: ENV1283MC-2009-1209

October 28, 2009

Mr. James T. Hunt
Chair, Trent Conservation Coalition Source Protection Committee
c/o Lower Trent Conservation
714 Murray Street, RR 1
Trenton ON K8V 5P4

Dear Mr. Hunt:

Thank you for your letter of October 1, 2009, in which you request a formal extension to the due date for the submission of your five assessment reports for the Kawartha-Haliburton, Otonabee-Peterborough, Crowe Valley, Ganaraska, and Lower Trent source protection areas. I appreciate the time you have taken to re-examine your workplan and provide me with this updated request, as per my June 1, 2009 letter.

I have reviewed the rationale provided in your letter and the updated workplan to complete the assessment reports. Based on the information provided, and under my authority under section 94 of the *Clean Water Act, 2006*, I am granting you and the Trent Conservation Coalition Source Protection Committee an extension to the due dates of your five assessment reports to August 30, 2010.

I recognize the scope and complexity of the work being undertaken within your region and the need for you to complete the technical work associated with 5 assessment reports. Therefore, I feel it is warranted to give you and your committee additional time to submit the assessment reports.

I have not granted you the full extension requested because I feel there is more time than necessary allotted to complete the consultation on the assessment reports. Additionally, to grant you the full extension as requested to October 2010 would risk the delivery of the source protection plans by August 20, 2012.

I encourage you and your committee to review the proposed schedule for the consultation of the assessment reports and gain some additional efficiency.

I would take this opportunity to remind you of the legislative requirement to submit your source protection plan to the Minister for review and approval no later than August 20, 2012 and trust that you will be working diligently to meet this date.

I appreciate the amount of hard work the Trent Conservation Coalition Source Protection Committee and the five Source Protection Authorities are doing to ensure that the assessment reports are completed in an efficient and timely manner. I would expect that this high level of effort would continue in order to complete the prescribed work by your new due date of August 30, 2010.

I assure you that the ministry will continue to do everything it can to support source protection committees and authorities in achieving the compliance dates.

Sincerely,

Ian Smith, Director
Source Protection Programs Branch
Ministry of the Environment

c: Jim Harrison, Chair, Lower Trent Source Protection Authority
Larry O'Connor, Chair, Kawartha-Haliburton Source Protection Authority
Suzanne Partridge, Chair, Crowe Valley Source Protection Authority
Brian Fallis, Chair, Ganaraska Region Source Protection Authority
Terry Low, Chair, Otonabee-Peterborough Source Protection Authority
Glenda Rodgers, Project Manager TCC Source Protection Region
Keith Willson, Manager, Source Protection Approvals
Wendy Lavender, Liaison Officer, Source Protection Implementation

Ministry of the Environment

Source Protection Programs Branch

8th Floor
2 St. Clair Ave. West
Toronto ON M4V 1L5

Ministère de l'Environnement

Direction des programmes de protection des sources

8e étage
2, avenue St. Clair Ouest
Toronto (Ontario) M4V 1L5

Ontario

Log: ENV1174IT-2010-103

May 6, 2010

Ms. Glenda Rodgers
Project Manager
Trent Conservation Coalition Source Protection Region
714 Murray Street
R.R. #1
Trenton ON K8V 5P4

Dear Ms. Rodgers:

I am responding to your April 6, 2010 letter regarding your request for Director's approval to use an alternate Study Year in three Tier 2 water budgets under Rule 15.1 to use of the Director's Technical Rules (Rules) for the completion of the assessment report under the *Clean Water Act* (CWA) for the Kawartha-Haliburton, Crowe Valley, and Lower Trent source protection areas.

Variation from Rule 31 with respect to Study Year for Water Quantity Stress Assessment for the Sub-Watersheds Contributing to the Lindsay Municipal Intake in the Kawartha-Haliburton source protection area.

As set out in your correspondence, your proposal is to use 2008 as the Study Year for the assessment, instead of 2008 as required by the Rule 31.

We agree with your opinion that the data available in 2008 was more comprehensive and accurate than the data available in 2007, and thus the 2008 data provides a better representation of water usage in the area.

Variation from Rule 31 with respect to Study Year for Water Quantity Stress Assessment for the Sub-Watershed Associated with the Havelock Municipal Wells in the Crowe Valley source protection area.

As set out in your correspondence, your proposal is to use 2006 as the Study Year for the assessment, instead of 2007 as required by Rule 31.

Water use data was gathered from 2005-2008, and the year 2006 showed the maximum taking during the period. We agree with your opinion that 2006 best represent water usage in the area.

Variation from Rule 31 with respect to Study Year for Water Quantity Stress Assessment for the Sub-Watershed Associated with the Colborne Municipal Wells in the Lower Trent source protection area.

As set out in your correspondence, your proposal is to use 2006 as the Study Year for the assessment, instead of 2007 as required by Rule 31.

Water use data was gathered from 2005-2008, and the year 2006 showed the maximum taking during the period. We agree with your opinion that 2006 best represent water usage in the area.

In accordance with my authority under Rule 15.1, I hereby provide Director's approval for the use of these alternate methods for specified drinking water systems in the Kawartha-Haliburton, Crowe Valley, and Lower Trent source protection areas.

Your rationale for the use of these alternative methods and how they were applied must be included in the relevant assessment report.

We thank you for your efforts in completing the technical studies in support of the assessment report under the CWA. If you have any questions or require additional information, please contact our office.

Sincerely,

Ian Smith, Director
Source Protection Programs Branch
Ministry of the Environment

cc: James Hunt, Trent Conservation Coalition Source Protection Committee Chair
Heather Malcolmson, Manager, Source Protection Planning
Keith Willson, Manager, Source Protection Approvals
Wendy Lavender, Liaison Officer, Source Protection Implementation

Ministry of
the Environment

Source Protection Programs
Branch

8th Floor
2 St. Clair Ave. West
Toronto ON M4V 1L5

Ministère de
l'Environnement

Direction des programmes de protection
des sources

8e étage
2, avenue St. Clair Ouest
Toronto (Ontario) M4V 1L5

Ontario

Log: ENV1174IT-2010-92

April 8, 2010

Ms. Glenda Rodgers
Project Manager
Trent Conservation Coalition Source Protection Region
714 Murray Street
R.R. #1
Trenton ON K8V 5P4

Dear Ms. Rodgers:

I am responding to your March 25, 2010 letter regarding your request to use an alternate classification for the Bayside intake under the Rule 55.1 of the Director's Technical Rules (the Rules) for the completion of the assessment report under the Clean Water Act (CWA) for the Trent Conservation Coalition source protection region.

Variation from Rule 55.1 – Classification of Intakes

The Director has the authority under technical rule 55.1 to notify a SPC of the classification of an intake. Based on technical rule 55, the Bayside intake, located in the Bay of Quinte, is classified as a type A intake. Though this letter, I am providing notice that the intake is to be classified as a Type D intake (Others), instead of a Type A intake. The Bayside intake is located at the Bay of Quinte, which is connected to Lake Ontario (Great Lake). Given the rationale as stated in the letter, we concur with your opinion that the character and nature of the Bay of Quinte is distinct from the Great Lakes with respect to hydrodynamics and water quality and therefore, the Bayside intake can be classified as a Type D intake.

In accordance with my authority under Rule 55.1, I hereby classify the intake as a Type D intake.

This letter notifying you of the classification of the intake must be included in your assessment report.

...2

We thank you for your efforts in completing the technical studies in support of the assessment report under the CWA. If you have any questions or require additional information, please contact our office.

Sincerely,

Ian Smith, Director
Source Protection Programs Branch
Ministry of the Environment

cc: Keith Taylor, Project Manger, Quinte source protection area
Wendy Lavender, Liaison Officer
Heather Malcolmson, Manager, Source Protection Planning
Keith Willson, Manager, Source Protection Approvals

Ministry of the Environment

Source Protection Programs Branch

8th Floor
2 St. Clair Ave. West
Toronto ON M4V 1L5

Ministère de l'Environnement

Direction des programmes de protection des sources

8e étage
2, avenue St. Clair Ouest
Toronto (Ontario) M4V 1L5

Ontario

Log: ENV1174IT-2010-130

May 13, 2010

Ms. Glenda Rodgers
Project Manager
Trent Conservation Coalition Source Protection Region
714 Murray Street
R.R. #1
Trenton ON K8V 5P4

Dear Ms. Rodgers:

I am responding to your May 6, 2010 letter regarding your request for Director's approval to use an alternate method for the delineation of IPZ-3 for the Type-D intakes in the Trent River System, and to use modified parameters to assess area vulnerability factors used in estimating IPZ- 3 vulnerability scores for the Type-D intakes in the Trent River System, under Rule 15.1 of the Director's Technical Rules (Rules) for the completion of the assessment report under the *Clean Water Act* (CWA) for the Trent Conservation Coalition source protection region.

1. Rule 70(1) - IPZ-3 Delineation for the Type-D Intakes in the Trent River System

As set out in your correspondence, your proposal is to delineate the IPZ-3 intakes as "tessellated" forms (i.e. IPZ-3 is truncated at the IPZ-1 of the intake located upstream), where IPZ-3 of an intake will fit together (such as jigsaw puzzle pieces) with the IPZs of the intakes located upstream of the intake being considered.

As the Trent River system constitutes a large watershed (approx. 12,500 km^2) with drinking water intakes (Type-D) located in different sections of the waterway, either upstream or downstream of one or more of the other intakes, we agree with your opinion that the "tessellated" approach will better address any threats in the contributing watershed upstream of the next intake, with the assessment of vulnerability of the closest intake. In addition, this approach is consistent with the approach being used by the Quinte Source Protection Region for the

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downstream intakes located along the Bay of Quinte (Trent River discharges on to the Bay of Quinte).

2. Rule 92(1) - Use of Modified Parameters to Assess Area Vulnerability Factors Used in Estimating IPZ- 3 Vulnerability Scores for the Type-D Intakes in the Trent River System

As set out in your correspondence, your proposal is to divide the IPZ-3 area into subsections (i.e. IPZ-3a, IPZ-3b, and IPZ-3c broadly based on proximity to the intake; IPZ-3a is closest to the intake and IPZ-3c is furthest from the intake) and assign vulnerability scores based on factors described in Rule 92, to allow for different vulnerability scores to be applied to different sections of the IPZ-3s. The IPZ-3 area described by Rule 92 (1) and Rule 92 (4) corresponds to the "tessellated" IPZ-3 area and not the equivalent contributing IPZ-3 area to the intake.

We agree with your opinion that, based on the "tessellated" approach, the resulting vulnerability scores of IPZ-3s are generally higher and more conservative. In this approach, the IPZ-3 areas that are closer to an intake would always have a higher score than an IPZ-3 area that is further away from an intake. For example, IPZ-3c for a specific intake would always score lower than IPZ-3a for an intake that is located upstream. This is consistent with the recommendation provided by the peer-review panel that reviewed all the surface water vulnerability reports within TCC (except for the intakes located in Lake Ontario).

It was noted that no significant threats are identified within any of the IPZ-3s of the intakes located along the Trent River system. However, the vulnerability scores assigned to IPZ-3 areas based on this "tessellated" approach are conservative (i.e. vulnerability score assigned to a specific polygon in an IPZ-3 area based on the "tessellated" approach is higher than a vulnerability score that would have been assigned to this polygon based on a "contributing area" approach). This conservative vulnerability score assignment ensures that any "moderate" and "low" threats that may be present in an IPZ-3 area can be identified and would not be precluded from being identified for any planning consideration.

In accordance with my authority under Rule 15.1, I hereby provide Director's approval for the use of these alternate methods for the Crowe Valley Source Protection Area, Kawartha-Haliburton Source Protection Area, Lower Trent Source Protection Area, and Otonabee-Peterborough Source Protection Area.

Your rationale for the use of these alternative methods and how they were applied must be included in the relevant assessment report.

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We thank you for your efforts in completing the technical studies in support of the assessment report under the CWA. If you have any questions or require additional information, please contact our office.

Sincerely,

Ian Smith, Director
Source Protection Programs Branch
Ministry of the Environment

c. James Hunt, Trent Conservation Coalition Source Protection Committee Chair
Heather Malcolmson, Manager, Source Protection Planning
Keith Willson, Manager, Source Protection Approvals
Wendy Lavender, Liaison Officer, Source Protection Implementation

Ministry of
the Environment

Source Protection Programs
Branch

8th Floor
2 St. Clair Ave. West
Toronto ON M4V 1L5

Ministère de
l'Environnement

Direction des programmes de protection
des sources

8e étage
2, avenue St. Clair Ouest
Toronto (Ontario) M4V 1L5

Ontario

Log: ENV1174IT-2009-258

November 27, 2009

Ms. Glenda Rodgers
Project Manager, Source Protection Planning
Trent Conservation Coalition Source Protection Region
714 Murray St, RR#1
Trenton ON K8V 5P4

Dear Ms. Rodgers:

Thank you for your email request of October 30, 2009 to use an alternate method under Technical Rule 37 (5) for the completion of Assessment Reports under the Clean Water Act (CWA) for the Trent Conservation Coalition (TCC) Source Protection Region.

As set out in your correspondence, your proposal is to use an alternative grid centroid within which you determine the impervious surface percentages within each source protection area. As per your email, you are proposing to establish one grid for the complete source protection region, instead of separate grids for each source protection area as required by the assessment report technical rule 17. In our opinion the use of this alternative grid centroid within the source protection region will not impact the implementation of this rule, other than to move the grid within a 1km square area. Therefore, this approach is equivalent to the method currently required through sub-rule 16(11) and Rule 17.

In accordance with my authority under Rule 15.1 of the Technical Rules, I hereby provide Director's approval for the use of this alternate method for all 5 source protection areas within the Trent Conservation Coalition source protection region.

Your rationale for the use of an alternative grid and how it is being applied must be included in your assessment report.

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We thank you for your efforts in completing the technical studies in support of the assessment report under the CWA. If you have any questions or require additional information, please contact our office.

Sincerely,

Ian Smith, Director
Source Protection Programs Branch
Ministry of the Environment

cc: James Hunt, Trent Conservation Coalition Source Protection Committee Chair
Heather Malcolmson, Manager, Source Protection Planning
Keith Willson, Manager, Source Protection Approvals
Wendy Lavender, Liaison Officer, Source Protection Implementation

Ministry of the Environment

Source Protection Programs Branch

8th Floor
2 St. Clair Ave. West
Toronto ON M4V 1L5

Ministère de l'Environnement

Direction des programmes de protection des sources

8e étage
2, avenue St. Clair Ouest
Toronto (Ontario) M4V 1L5

Ontario

Log: ENV1174IT-2010-112

May 14, 2010

Ms. Glenda Rodgers
Trent Conservation Coalition Source Protection Region
Lower Trent Conservation
714 Murray Street, R. R. #1
Trenton, Ontario K8V 5P4

Dear Ms. Glenda Rodgers,

We are in receipt of your email dated March 8, 2010 and your background letter of September 18, 2009. Your have requested a Director's opinion regarding the addition of the congregation of waterfowl as a local drinking water threat immediately upstream of the Lakefield and Peterborough drinking water intakes, located in the Otonabee-Peterborough Source Protection Area under Rule 119 of the Technical Rules: Assessment Report.

In accordance with my authority under Rule 119, 120, or 121, I hereby provide the following Director's opinion for the following activity, circumstance and hazard rating related to you proposed request:

- **ACTIVITY**: Maintaining open areas of mown grass for recreational activities that promote the congregation of waterfowl within or near surface water bodies.

- **CIRCUMSTANCE**: Congregation of waterfowl results in discharge of pathogens to surface water in an area where there are known drinking water quality impacts from waterfowl within an intake protection zone (IPZ).

- **HAZARD RATING ASSIGNED BY DIRECTOR**: The hazard rating assigned for this activity and circumstance is 10.

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This activity, circumstance, and hazard rating have been approved as a local threat in the Otonabee-Peterborough Source Protection Area specific to the IPZ upstream of the Lakefield and Peterborough drinking water intakes.

Your rationale for the inclusion of this local threat along with a copy of this letter must be included in your assessment report.

Sincerely,

Ian Smith, Director
Source Protection Programs Branch
Ministry of the Environment

c:
Keith Willson, Manager, Source Protection Approvals
Paul Heeney, Manager, Source Protection Implementation
Heather Malcolmson, Manager, Source Protection Planning
Katie Fairman, Supervisor, Source Protection Implementation
Peter Rider, Senior Drinking Water Program Advisor, Source Protection Planning
Wendy Lavender, Liaison Officer, TCC, Source Protection Implementation

Ministry of
the Environment

Source Protection Programs
Branch

8th Floor
2 St. Clair Ave. West
Toronto ON M4V 1L5

Ministère de
l'Environnement

Direction des programmes de protection
des sources

8e étage
2, avenue St. Clair Ouest
Toronto (Ontario) M4V 1L5

Ontario

Log: ENV1174IT-2009-182

August 4, 2009

Ms. Glenda Rodgers, M.Sc.
Project Manager, Source Protection Planning
Trent Conservation Coalition Source Protection Region
714 Murray St, RR#1
Trenton ON K8V 5P4

Dear Ms. Rodgers:

Thank you for your request, under Technical Rule 37 (5), to use an alternate method of determining groundwater (intrinsic) vulnerability for the completion of the Assessment Report under the Clean Water Act (CWA) for parts of the Trent Conservation Coalition (TCC) Source Protection Region.

As set out in your correspondence, the proposed approach is to use the Aquifer Vulnerability method where the CAMC-YPDT regional geological model exists and outside of this area, primarily in the area of the Canadian Shield within the TCC Region, to use a modified Intrinsic Susceptibility Index method which includes:

1. Addressing the limited spatial density of water well data.
2. Incorporating surficial geological mapping where areas that were mapped as either bare rock or shallow overburden of less than 1.5 metres thickness or bedrock covered by sand or gravel strata.
3. Such areas of sparse stratigraphic and hydrogeologic data which have bedrock at or near the bedrock surface or covered by relatively highly permeable strata will be identified as highly vulnerable aquifers.

In accordance with my authority under section 107(1) of the Clean Water Act, 2006, I hereby provide Director's approval for the use of this alternate method.

Your approach to assigning the vulnerability, along with the methodology discussed herein, and the subsequent results must be included in your assessment report.

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We thank you for your efforts in completing the technical studies in support of the assessment report under the CWA. If you have any questions or require additional information, please contact our office.

Sincerely,

Ian Smith, Director
Source Protection Programs Branch
Ministry of the Environment

cc: James Hunt, Trent Conservation Coalition Source Protection Committee Chair
Heather Malcolmson, Manager, Source Protection Planning
Keith Willson, Manager, Source Protection Approvals
Wendy Lavender, Liaison Officer, Source Protection Implementation

The Regional Municipality of Durham

Works Department

605 ROSSLAND RD. E.
P.O. BOX 623
WHITBY ON L1N 6A3
CANADA
905-668-7711
1-800-372-1102
Fax: 905-668-2051
E-mail:
works@region.durham.on.ca

www.region.durham.on.ca

C. R. Curtis, P.Eng., MBA
Commissioner of Works

June 18, 2009

Glenda Rogers
Trent Conservation Coalition Source Protection Region
c/o Lower Trent Conservation
714 Murray Street
R.R.#1 Trenton ON, K8V 5P4

Re: **Peer Review of Groundwater Studies**
Trent Conservation Coalition Source Protection Region
Regional Municipality of Durham

Dear Ms. Rogers:

The Regional Municipality of Durham (Durham Region) is satisfied with the peer review approach being undertaken for the Trent Conservation Coalition (TCC).

We believe that the peer review approach proposed by TCC is generally consistent with the peer review approach proposed by other Source Protection Regions (SPR) located within Durham Region. The TCC approach satisfies the requirements outlined in the Terms of Reference for the Ganaraska Region and Kawartha-Haliburhton Source Protection Areas.

Should you require more information, please do not hesitate to contact Beata Golas at 905.668.4113 extension 3447.

Yours truly,

Beata Golas, M.Sc. P. Geo.
Hydrogeologist
BG

cc
John Presta, Director of Environmental Services
Jim McGilton, Manager, Engineering Planning and Studies
Ian McIlwham, Compliance Manager
Christine Drimmie, Policy Development

June 18, 2009

Beata Golas P. Geo., Hydrogeologist
The Regional Municipality of Durham
Works Department, Engineering Planning & Studies
PO. BOX 623
Whitby, ON L1N 6A3

Dear Beata:

Re: Peer Review Process for Assessing Vulnerability within Municipal Wellheads for TCC, SGBLS, and CTC Source Protection Regions

This is further to our previous discussions and correspondence regarding common peer review approaches for the source protection vulnerability studies for the municipal systems in Durham Region.

Our Water Resources Engineer, Shan Mugalingam, has reviewed the peer review criteria for TCC, SGBLS and CTC and has provided below a table illustrating the common elements and some unique criteria adopted by the various Source Protection Regions.

Evaluation Criteria	TCC	SGBLS	CTC
Approved Methods and Models (as per Technical Rules)	✓	✓	✓
Rationale for Model Selection	✓	✓	✓
Geological Layers/Model	✓	✓	✓
Appropriateness of Parameters used in the Model	✓	✓	✓
Model Domain/Model Boundary	✓	✓	✓
Calibration Process	✓	✓	✓
Review of Data Used	✓	✓	✓
Uncertainty Analysis	✓	✓	
Assumptions used in the Model	✓		✓
Location of Wells & Appropriate Pumping Rates		✓	
Discretization of Model Domain & Scale of Analysis			✓
Compliance with Rules (Delineation of WHPAs & Vulnerability Assessment)	✓		✓
Validity of Final Product	✓		✓
Limitations & Long-Term Recommendations	✓		✓

We are hopeful that you feel that the common criteria captures most of the critical elements and that you are satisfied that there is a common approach to satisfy the requirements in the Terms of Reference for the Ganaraska Region and Kawartha-Haliburton Source Protection Areas.

The CTC approach lists more specific items to be reviewed, which may be captured in more generalized line items in the TCC and SGBLS approaches (e.g. Discretization of Model Domain & Scale of Analysis may be included in Model Domain/Model Boundary). The CTC peer review approach also includes items that go beyond vulnerability assessment (which was not required by the TCC Terms of Reference) and also includes a review of items that may be outside of the scope of the Clean Water Act (e.g. use for PTTW). The SGBLS includes a unique scoring approach. While TCC uses a similar table, it does not rely on a scoring system. The TCC approach seeks the peer reviewer's professional opinion on the professional judgment exercised by the study consultants.

In summary, while there are unique criteria, the majority and certainly most of the important criteria are common to all three approaches.

Please let me know if this analysis satisfies your request for common peer review approaches for Durham. As discussed previously, a letter that effect, would be appreciated to provide to our Source Protection Committee.

Sincerely,

Glenda Rodgers, Project Manager
Project Manager, Source Protection Planning
613-394-3915

Copy: Don Goodyear, SGBLS SPR
Beverley Thorpe, CTC SPR

TOWNSHIP OF
CAVAN MONAGHAN
Have it all. Right here.

988 County Road 10
Millbrook, Ontario
L0A 1G0

Tel: (705) 932-2929
Fax: (705) 932-3458
Email: services@cavanmonaghan.net

www.cavanmonaghan.net

Meeting:	Committee of the Whole
Date:	April 20, 2009
Report Number:	Planning 2009-16
Subject:	Source Water Protection – Planned System Requirements

RECOMMENDATIONS:

It is respectfully recommended that the Committee of the Whole recommend to Council the following:

1. That Report No. Planning 2009-16 be received;
2. That the Council of the Township of Cavan Monaghan pass a resolution stating that the Township does not intend to establish a planned municipal drinking water system in part of Lot 17, Concession 8 of the Cavan Ward;
3. That notice of the resolution be published in the Millbrook Times; and
4. That a copy of the resolution be forwarded to the Source Protection Committee for the Trent Conservation Coalition.

BACKGROUND & PURPOSE:

The Master Plan for the Fraserville-North Monaghan Servicing Study identified two potential well sites for the planned municipal drinking water system. The potential well sites are located in part of Lot 3, Concession 11 of the North Monaghan Ward and part of Lot 17, Concession 8 of the Cavan Ward.

Municipal wells for drinking water systems are subject to source protection planning regulations. The Township of Cavan Monaghan is part of the Trent Conservation Coalition for the purposes of source water protection planning.

A Terms of Reference for Drinking Water Source Protection was developed by the Trent Conservation Coalition. The Terms of Reference outlines the work plan for the development of the Assessment Report and Source Protection Plan. During the development of the Terms of Reference, the Township of Cavan Monaghan asked the Trent Conservation Coalition to include the Kells and Leahy lands in the technical studies as planned drinking water systems.

During the preparation of the Assessment Report, the Township determined that the Leahy site is no longer suitable for a municipal drinking water system. In accordance with the requirements of the Clean Water Act, 2006, a council resolution is required to eliminate the site from the reporting requirements of the Trent Conservation Coalition.

DISCUSSION:

In the Clean Water Act, 2006, a planned system is a system or part of a system that has been identified as the preferred solution within a completed planning process conducted in accordance with an approved class environmental assessment. Property in part of Lot 17, Concession 8 of the Cavan Ward was identified in the Township of Cavan Monaghan Master Plan as one of the preferred locations for a municipal well site.

In accordance with Section 14 (4) of the Clean Water Act, 2006 Ontario Regulation 385/08, the submission of an assessment report for part of Lot 17, Concession 8 of the Cavan Ward is not required if the Council of the Municipality has:

1. passed a resolution stating that the Municipality does not intend to establish the drinking water system;
2. published notice of the resolution in one or more newspapers that, in the opinion of the council of the municipality, are of sufficiently general circulation to bring the notice to the attention of the public in the municipality; and
3. sent a copy o the resolution to the source protection committee for the source protection area.

Given the Township direction to pursue an alternative water supply, the passing of a resolution is required to comply with the Clean Water Act, 2006 regulations.

FINANCIAL IMPACT:

GL Number 01-4920-3730 contains funds to cover the cost of advertising the passing of the resolution.

CONCLUSION:

The Master Plan for the Fraserville-North Monaghan Servicing Study identified two potential well sites for the planned municipal drinking water system. The Clean Water Act, 2006 requires the submission of an assessment report for planned municipal drinking water systems. The Township has determined that the planned well site in part of Lot 17, Concession 8 of the Cavan Ward is not suitable for a municipal well site.

In accordance with the requirements of the Clean Water Act, 2006, a council resolution is required to eliminate the potential well site in part of Lot 17, Concession 8 of the Cavan Ward from the reporting requirements of the Trent Conservation Coalition. The passing of the resolution must be advertised in a local newspaper and a copy of the resolution forwarded to the Source Protection Committee for the Trent Conservation Coalition.

Respectfully Submitted by,

K Ellis

Karen Ellis, B.A.A.
Director of Planning

Reviewed by,

Yvette Hurley
Chief Administrative Officer

DRAFT

Minutes
Township of Cavan Monaghan
Committee of the Whole Meeting
Council Chambers
Monday, April 20, 2009
9:30 a.m.

The Committee of the Whole Meeting of the Cavan Monaghan Council was held in the Council Chambers on Monday, April 20, 2009 at 9:30 a.m.

Those members in attendance were:

Council	Neal Cathcart	Reeve
	Fern Armstrong	Councillor
	Brian Bartlett	Councillor
	Jim Chaplin	Councillor
	Those members absent:	
	Brian Fallis	Deputy Reeve
Staff	Yvette Hurley	C.A.O.
	Gail Empey	Clerk
	Loren Drinkwalter	Director of Finance/Treasurer
	Karen Ellis	Director of Planning and Building Services
	Nancy Davis	Deputy Clerk
	Nelson Edgerton	Manager Protective Services
	Mark Minaker	Director of Roads and Environmental Services
	Bill Balfour	Deputy Fire Chief/By-Law Enforcement Officer
	Brian Millett	Manager of Community Development & Facilities

1. **OPEN SESSION 9:30 a.m.**

2. **CALL TO ORDER – Reeve Cathcart**

Reeve Cathcart called the Committee of the Whole Meeting – Open Session - to order at 9:40 a.m.

3. **DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF**

Reeve Cathcart advised members to disclose any pecuniary interest at this time or as the situation arises.

4. **CLOSED SESSION**

CW/20/04/09/01 Moved by Bartlett
Seconded by Armstrong
That Township of Cavan Monaghan Committee of the Whole move into closed session under Section 239 of the Municipal Act, 2001, as amended, for the purpose of educating or training the members and to discuss matters pertaining to litigation or potential litigation. Carried.

The Township of Cavan Monaghan Committee of the Whole moved into closed session at 9:41 a.m.

Committee of the Whole recessed at 10:39 a.m. and reconvened at 10:55 a.m.

CW/20/04/09/02 Moved by Chaplin
Seconded by Armstrong
That Township of Cavan Monaghan Committee of the Whole rise from closed session. Carried.

The Township of Cavan Monaghan Committee of the Whole rose from closed session at 12:26 p.m.

5. ADDITIONS / DELETIONS TO THE AGENDA

Committee of the Whole reconvened at 1:08 p.m.

Reeve Cathcart again advised members to disclose any pecuniary interest at this time or as situation arises again.

Car Lot and Trailer – Councillor Bartlett

Unlicensed & Inoperable/Derelict Vehicles - Councillor Bartlett

Fraserville Water and Sewer Project – Councillor Chaplin

CW/20/04/09/03 Moved by Chaplin
Seconded by Armstrong
That agenda of April 20, 2009 be accepted with the above-noted additions. Carried.

6.0 DELEGATIONS

6.1 Gary King C.A.O. County of Peterborough – 2009 Peterborough County Budget 1:00 p.m.

Gary King was in attendance to address Council regarding the 2009 County Budget. Mr. King reviewed the 2008 accomplishments of the County including the chairing by Warden Gerow of the Eastern Ontario Warden's Caucus, conclusion of Rural Connections Phase I, installation of 21 new Public Access Defibrillators, launching of "Trip Click" web-based tourism mapping, and the move from 5 stream to 2 stream recycling.

Mr. King advised that the 2009 County Budget has been approved in the amount of $54,398,975. Mr. King highlighted the priorities of the Public Works and Environmental Services Department including Deer Bay Bridge, Brown's Bridge and road reconstruction/resurfacing for 2009.

Mr. King concluded by relating the 2008-2009 sustainability initiatives in the County of Peterborough.

6.2 Andy Mitchell – Annual Update from GPAEDC 1:10 p.m.

Andy Mitchell, President/C.E.O. of GPAEDC, was in attendance to update Council on the economic circumstances in the region, the strengths and weaknesses in the region and activities and approaches to address the current situation.

Mr. Mitchell noted that after a number of years of expansion, the economy is in a period of contraction and slower growth combined with a loss of individual wealth and decline in the real estate market.

The strengths of the region include a very diversified economy, namely the manufacturing sector, the tourism sector, the agricultural sector and the

small business sector. The business cycle impacts different sectors at different times so diversification is a strength. The natural assets of the region and arable land still remain intact.

A great amount of wealth is generated locally and investment improvements such as construction at Peterborough Airport, Highway 7 upgrades, possible rail link, and extension of the 407 add or will add to the economy.

Senior levels of government are investing in our area through the Building Canada Fund, Eastern Ontario Development Program and the Community Adjustment Fund.

GPAEDC recognizes the importance of both business attraction and retention, the importance of planning for the immediate, the medium and the long term, the importance of the manufacturing and the small business sector, as well as the importance of innovation, tourism, agriculture and rural development.

7.0 COUNCIL, COMMITTEE AND STAFF REPORTS

7.1 Report – Corporate Services – 2009-09
King Street Road Closure – Car Show

CW/20/04/09/04 Moved by Chaplin
Seconded by Bartlett
That it is respectfully recommended that the Committee of the Whole recommend to Council that Report Number – Corporate Services – 2009-09 be received; and

That Council for the Township of Cavan Monaghan authorize Corporate Personnel to apply for a Special Events Road Occupancy Permit from the County of Peterborough to close King Street from Union Street to Tupper Street on Saturday, July 4, 2009 between 7:00 a.m. and 4:00 p.m. to accommodate the annual Car Show; and

That the Township of Cavan Monaghan provide a Certificate of Insurance to the County of Peterborough for the July 4th, 2009 Car Show; and

That the B.I.A. be asked to report back on benefits derived from closing King Street and having Car Show located at that venue. Carried as amended.

7.2 Report – Corporate Services – 2009-11
March 2009 Accounts Payable

CW/20/04/09/05 Moved by Armstrong
Seconded by Chaplin
That it is respectfully recommended that the Committee of the Whole recommend to Council that Report Number – Corporate Services – 2009-11 be received; and

That the Cheque Register for the month of March 2009 in the amount of $1,904,542.85 be received for information purposes. Carried.

7.3 Report – Planning – 2009-16
Source Water Protection – Planned System Requirements

CW/20/04/09/06 Moved by Bartlett
Seconded by Armstrong
That it is respectfully recommended that the Committee of the Whole recommend to Council that Report Number – 2009-16 be received; and

That the Council of the Township of Cavan Monaghan pass a resolution stating that the Township does not intend to establish a planned municipal water system in part of Lot 17, Concession 8 of the Cavan Ward; and

That notice of the resolution be published in the Millbrook Times; and

That a copy of the resolution be forwarded to the Source Protection Committee for the Trent Conservation Coalition. Carried.

7.4 **Report – Planning – 2009-17**
Beaverbrook Homes (Otonabee) Inc. Condominium Proposal – Part Lots 20 & 21, Concession 16, Otonabee Ward

CW/20/04/09/07 Moved by Chaplin
Seconded by Armstrong
That it is respectfully recommended that the Committee of the Whole recommend to Council that Report Number – Planning – 2009-17 be received; and

That the County of Peterborough be notified, in writing, that the Township of Cavan Monaghan has no objection, in principle, to the proposed condominium development in part of Lots 20 and 21, Concession 16 of the Otonabee Ward in the Township of Otonabee-South Monaghan provided that the servicing, engineering and environmental issues are addressed to the satisfaction of the County of Peterborough peer review consultants; and

That the Township of Cavan Monaghan requests a copy of the decision regarding the application. Carried.

7.5 **Report – Planning – 2009-18**
Leahy Severance Environmental Impact Mitigation Measures Agreement – Application B-81-07

CW/20/04/09/08 Moved by Bartlett
Seconded by Chaplin
That it is respectfully recommended that the Committee of the Whole recommend to Council that Report Number – Planning – 2009-18 be received; and

That Council authorize the removal of the Environmental Impact Mitigation Measures Agreement between Martin Lawrence Leahy and Paul James Leahy and the Township of Cavan Monaghan (Instrument No. PE86569) from the title to Part 1 on Plan 45R-14383 in Part of Lot 17, Concession 8 of the Cavan Ward; and

That letter of concern be sent to Niblett Environmental Associates Inc. Carried as amended.

7.6 **Report – Building – 2009-03**
Building Permit Report for March 2009

CW/20/04/09/09 Moved by Chaplin
Seconded by Armstrong
That it is respectfully recommended that the Committee of the Whole recommend to Council that Building Permit Report 2009-03 be received for information. Carried.

7.7 **Report – ECD – 2009-10**
New Riding Lawn Mower

CW/20/04/09/10 Moved by Armstrong
Seconded by Bartlett
That it is respectfully recommended that the Committee of the Whole recommend to Council that Report Number – ECD – 2009-10 be received; and

That Staff be directed to purchase a Toro Z580 from Heming Ltd. at a cost of $10,879 plus applicable taxes covered in the 2009 Capital Budget. Carried.

7.8 **Report – Roads Department – 2009-05**
Boundary Road Agreement - City of Kawartha Lakes

CW/20/04/09/11 Moved by Armstrong
Seconded by Bartlett
That it is respectfully recommended that the Committee of the Whole recommend to Council that Report Number – Roads Department – 2009-05 be received; and

That Council adopts the following revised Boundary Road Agreement with the City of Kawartha Lakes with the new agreement to read as follows:

The Township of Cavan Monaghan – Year Round Maintenance Responsibilities would include Dranoel Road N. north of Hwy. 7A to Stewart Line (approx. 3.9 kms), Dranoel Road S. south of Hwy. 7A to Railroad Crossing (approx 3.3 kms)* and Hayes Line East of County Rd. 10 to Hwy. 7 (approx. 6.4 kms)*; and

The City of Kawartha Lakes – Year Round Maintenance Responsibilities would include Hillview Drive north of Bethany Hills Rd. (approx. 0.9kms)*, Skiview Drive east of Hillview Drive (approx. 0.3 kms)*, Hogsback Road south of Ski Hill Rd. (Rd. 38) (approx. 0.3 kms)*, Hayes Line West of County Rd. 10 to Ski Hill Rd. (approx. 6.9 kms)* and Glamorgan Road (approx. 3.8 kms)* (*indicates changes to original agreement between Township of Cavan Monaghan and City of Kawartha Lakes (former Townships of Manvers and Emily); and

That the updated Boundary Road Agreement between the Township of Cavan Monaghan and City of Kawartha Lakes not take effect until the changes to the agreement are adopted by both Municipal Councils; and

That the Boundary Road Agreement between the Township of Cavan Monaghan and City of Kawartha Lakes includes that all capital works roadway improvements on boundary roads continue to be done at 50/50 cost sharing between the two municipalities; and

That Director of Roads and Environmental Services work out capital project financing arrangements; and

That bridge and culvert construction be considered separate items from roadway improvements; and

That changes, once approved by Township of Cavan Monaghan Council, are forwarded to the City of Kawartha Lakes for inclusion in the draft agreement. Carried as amended.

7.9 **Report – Roads Department – 2009-07**
Purchase of Plastic Tanks for Liquid Calcium Storage

CW/20/04/09/12 Moved by Bartlett
Seconded by Chaplin
That it is respectfully recommended that the Committee of the Whole recommend to Council that Report Number – Roads Department – 2009-07 be received; and

That Council authorizes the purchase of two (2) 10,000 U.S. gallon plastic tanks from Suurd's Feeding Equipment of Cavan, Ontario for the total sum of $18,890 plus applicable taxes; and

That funds to cover the cost of the purchase of the plastic storage tanks are already included in the approved 2009 Capital Budget. Carried.

7.10 **Report – Roads Department – 2009-08**
Hot Mix Paving - Bland Line

CW/20/04/09/13 Moved by Armstrong
Seconded by Chaplin
That it is respectfully recommended that the Committee of the Whole recommend to Council that Report Number – Roads Department – 2009-08 be received for information; and

That Township of Cavan Monaghan Staff be directed to proceed with quotations for hot mix paving. Carried as amended.

7.11 **Report – Administration – 2009-April**
Outstanding Action

CW/20/04/09/14 Moved by Chaplin
Seconded by Armstrong
That it is respectfully recommended that the Committee of the Whole recommend to Council that Report Number – Administration – 2009-April be received for information. Carried.

Additions

Councillor Bartlett advised he received call re: Car lot and Trailer at Highway 7 and Sharpe Line. Township requires adherence to any conditions imposed by Committee of Adjustment. Any further changes require a planning approval. Trailers are only permitted for temporary use during house construction.

Unlicensed and Inoperable/Derelict Vehicles - Property Standards By-Law –Letter to be drafted advising residents they have right to object to unlicensed and inoperable vehicles on property. Council to approve letter.

CW/20/04/09/15 Moved by Chaplin
Seconded by Bartlett
That Township of Cavan Monaghan support the proposed timeline schedule for the Fraserville Water and Sewer Project and submit an application to the Building Canada Fund by deadline of May 1, 2009; and

That Township of Cavan Monaghan support the primary water source for the Project as Millbrook Wells; and

That Council direct Staff to arrange and conduct the testing required to ensure correct water yield; and

That Staff be directed to conduct a Master Plan Review. Carried.

8. NEW BUSINESS

8.1 County O.P.P. Working Committee – C.A.O.

CW/20/04/09/16 Moved by Bartlett
Seconded by Chaplin
That Reeve Neal Cathcart be appointed as the Township of Cavan Monaghan representative to the County O.P.P. Working Committee. Carried.

8.2 Letter from St. Thomas Anglican Church re: 10 km. walk

CW/20/04/09/17 Moved by Armstrong
Seconded by Bartlett
That Township of Cavan Monaghan approve 10 km. walk on April 25, 2009 sponsored by St. Thomas Anglican Church in aid of the Millbrook Medical Centre expansion, conditional upon proof of insurance coverage. Carried.

Reeve Neal Cathcart suggested that Township representatives meet with Andy Mitchell from the GPAEDC regarding Peterborough Airport Governance after Mr. Mitchell's draft governance report is presented. Council may wish to reconsider its position regarding this matter after report received.

9. STATUS REPORTS/UPDATES

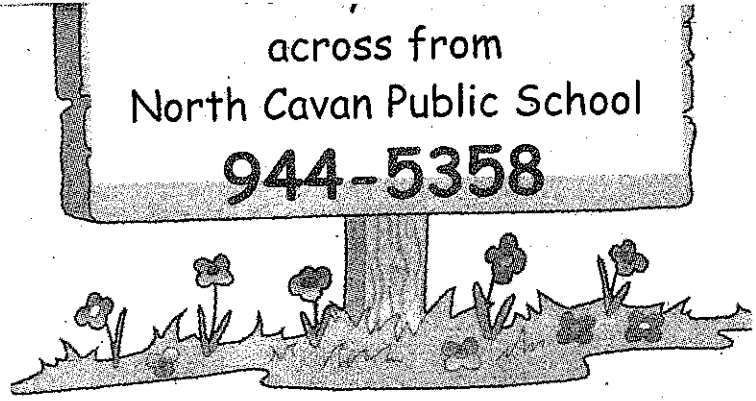
There were no status reports/updates.

10. ADJOURNMENT

CW/20/04/09/18 Moved by Chaplin
That the meeting adjourn.
Carried.

Meeting adjourned at 4:01 p.m.

Reeve Neal Cathcart **Clerk Gail Empey**



TOWNSHIP OF
CAVAN MONAGHAN
Have it all. Right here.

Public Notice
Planned Municipal Well

Lot 17, Con 8, Cavan Ward
Township of Cavan Monaghan

A planned municipal groundwater system at Lot 17, Con 8 of the Cavan Ward in the Township of Cavan Monaghan, within the Otonabee-Peterborough Source Protection Area, was included in the approved Drinking Water Source Protection Terms of Reference prepared by the Trent Conservation Coalition Source Protection Committee.

With this Notice, the Township of Cavan Monaghan is advising the public that it does not plan to move forward with this proposed municipal well. Therefore, the work plan activities, identified in the Terms of Reference, associated with this planned system will not be carried out.

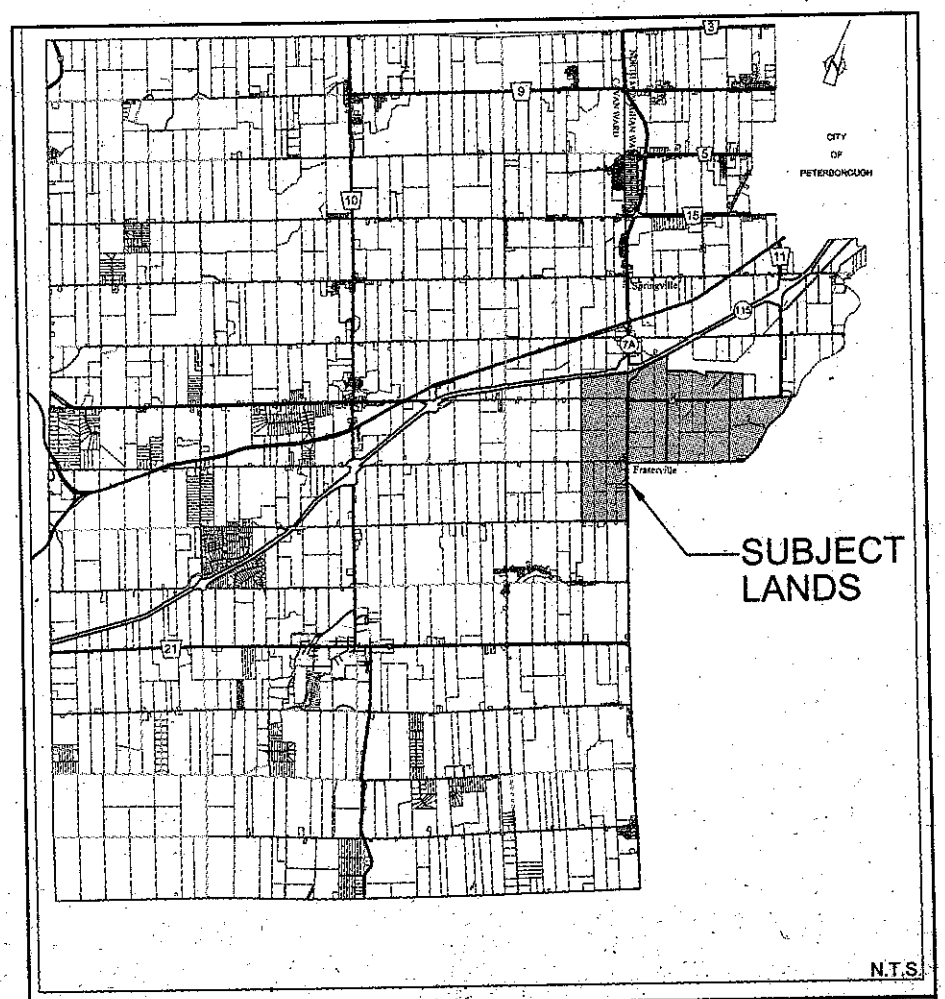
For more information contact Karen Ellis, Director of Planning via email at kellis@cavanmonaghan.net or via telephone at 705-932-9334.

Millbrook Times July 2 2009

public body as a party.

Dated at the Township of Cavan Monaghan this 30th day of June, 2009

Gail Empey, Clerk



STAFF REPORT

File No. SPC Report-03/09

Date: July 13, 2009

To: Source Protection Committee

From: Glenda Rodgers, Project Manager

RE: Planned Fraserville Municipal Well - Leahy Site

Subclause 15 (2) (e) (i) of the *Clean Water Act* requires that the Assessment Report identify all the wellhead protection areas that are in the source protection area and that are related to planned municipal drinking water systems that are planned to serve major residential developments.

The Terms of References for the Otonabee-Peterborough Source Protection Area includes two Planned Systems for Fraserville (the Leahy site and Lansdowne site). These are both located in the Township of Cavan Monaghan and were identified in the Master Plan for the Fraserville-North Monaghan Servicing Study as potential well sites.

The Township has now determined that the Leahy Site (located in part of Lot 17, Concession 8, Cavan Ward) is not suitable for a municipal well. The process for removing a Planned System from the requirements of the *Clean Water Act*, is outlined in Section 14, Subsection 4 of the General Regulation:

> *Subclause 15 (2) (e) (i) of the Act does not apply to a planned municipal drinking water system if the council of the municipality that would own the system has,*
>
> *(a) passed a resolution stating that the municipality does not intend to establish the drinking water system;*
>
> *(b) published notice of the resolution referred to in clause (a) in one or more newspapers that, in the opinion of the council of the municipality, are of sufficiently general circulation to bring the notice to the attention of the public in the municipality; and*
>
> *(c) sent a copy of the resolution referred to in clause (a) to the source protection committee for the source protection area. O. Reg. 385/08, s. 12*

The Township of Cavan Monaghan has addressed these requirements, as outlined below:

a. The attached staff report (Planning – 2009-16) was presented to the Cavan Monaghan Committee of the Whole at its April 20, 2009 meeting.

Resolution CW/20/04/09/06:

Moved by Bartlett
Seconded by Armstrong

That it is respectfully recommended that the Committee of the Whole recommend to Council that Report Number – 2009-16 be received; and

That the Council of the Township of Cavan Monaghan pass a resolution stating that the Township does not intend to establish a planned municipal water system in part of Lot 17, Concession 8 of the Cavan Ward; and

That notice of the resolution be published in the Millbrook Times; and

That a copy of the resolution be forwarded to the Source Protection Committee for the Trent Conservation Coalition.

Carried.

The minutes of the April 20, 2009 Committee of the Whole were approved by the Cavan Monaghan Council at its May 4, 2009 meeting:

R/04/05/09/03

Moved by Chaplin
Seconded by Armstrong

That minutes of Regular Meeting held April 6, 2009, Special Meeting held April 6, 2009, Committee of the Whole Meeting held April 20, 2009 and Special Meeting held April 22, 2009 be adopted as circulated.

Carried.

b. A notice was published in the July 2, 2009 edition of the Millbrook Times (attached)

c. The resolution (noted above) was e-mailed to Trent Conservation Coalition staff.

Based on the above, the tasks outlined in the Terms of Reference for the Planned "Leahy" System do not need to be completed.

DRINKING WATER SOURCE PROTECTION
ACT FOR CLEAN WATER

TRENT CONSERVATION COALITION
SOURCE PROTECTION REGION

July 22, 2009

Keith Willson
Manager, Source Protection Approvals
Source Protection Programs Branch
Ministry of the Environment
2 St. Clair Ave. W., 8th floor
Toronto, M4V 1L5

Dear Mr. Willson:

RE: Satisfying Section 14(4) of the General Regulation (under the Clean Water Act)

The Terms of Reference for the Otonabee-Peterborough Source Protection Area includes two Planned Systems for Fraserville: the Leahy and Lansdowne sites. These are both located in the Township of Cavan Monaghan and were identified in the Master Plan for the Fraserville-North Monaghan Servicing Study as potential well sites. The Municipality requested that these two systems be included in the Terms of Reference as Planned Systems.

The Municipality has now determined that the Leahy Site (located in part of Lot 17, Concession 8, Cavan Ward) is not suitable for a municipal well. Through discussions with Ministry of the Environment staff we understand that an amendment to the Terms of Reference is not required provided that the steps outlined in Section 14, Subsection 4 of the General Regulation are followed. In our opinion, the requirements have now been met. Please see the attached Staff Report –SPC Report-03/09 (and attachments) which was accepted by consensus by the Trent Conservation Coalition Source Protection Committee at the July 21, 2009 meeting.

I trust that this is satisfactory. Should you require anything further, please let me know.

Glenda Rodgers

Glenda J. Rodgers, M.Sc.
Project Manager, Source Protection Planning
Trent Conservation Coalition Source Protection Region
Phone: 613-394-3915 ext. 246

Copy: Debbie Scanlon, MOE
Wendy Lavender, MOE
Meredith Carter, Otonabee-Peterborough SPA
Karen Ellis, Township of Cavan Monaghan
Jim Hunt, TCC SPC Chair

c/o Lower Trent Conservation
714 Murray Street, R. R. #1
Trenton, Ontario K8V 5P4

Corporate and Financial Services

DonnaLee Craig
City Clerk

MEMORANDUM

TO: Chris Angelo
Director Public Works

Date: July 19, 2010

Re: Notification of Council Decision for Report 10-17PWES – Source Water Protection Plan Batawa Water Treatment Plant

---

Please be advised that the Council for the City of Quinte West considered the above report and subsequently adopted the following motion at its July 12, 2010 regular Council meeting.

Staff Report 10-17PWES

Motion No. 10-182

Moved by Harrison
Seconded by Reid

That City Council support the removal of the Batawa Water Treatment Plant from the Source Water Protection Plan process as a result of the connecting to the Frankford water supply.

Carried

DonnaLee Craig, AMCT
City Clerk

Corporation of the City of Quinte West
CERTIFIED TO BE A TRUE COPY
Signed.....
D. A. Craig, City Clerk

Office of the
DIRECTOR OF PUBLIC WORKS

Chris J. Angelo
Public Works Director

Report 10-17PWES

TO: Mayor John R. Williams and
Members of City Council

PREPARED BY: Chris Angelo
Director of Public Works & Environmental Services

DATE: June 29, 2010

SUBJECT: Source Water Protection Plan Batawa Water Treatment Plant

---

RECOMMENDATION:

That City Council support the removal of the Batawa Water Treatment Plant from the Source Water Protection Plan process as a result of the connecting to the Frankford water supply.

The City Council intends, within five years after passing this resolution to discontinue the use of the Batawa water system for potable water, and to revoke the approvals for the treatment plant under the Safe Drinking Water Act.

BACKGROUND:

The Clean Water Act was passed in 2006 to assist communities with protecting their sources of drinking water from contamination or overuse. Under the Act the Trent Conservation Coalition Source Protection Committee was formed and were tasked with leading the development of Source Water Protection Plans for all Municipal water sources in the region. This process is currently underway and has identified intake protection zones, identified potential threats to the source water within the IP zones, and developed an assessment report that is currently posted for public comment. Further to the assessment report a source protection plan will be developed to put policy in place to deal with the potential threats.

As part of the City 2010 capital construction program, a water link is being constructed from Batawa to Frankford so that the community of Batawa can be serviced with Municipal water from Frankford. Once complete the City will shut down the Batawa water treatment plant and will no longer utilize the raw water intake for water treatment purposes. The raw water intake will continue to supply non potable water to Industry and the Batawa Ski Hill. The Conservation Authority has advised that a source protection plan in not required for a non potable supply system.

For these reasons the City has been requested to pass a resolution under the Clean Water Act Section 14 (1) that exempts the requirement for the development of a source protection plan for the Batawa drinking water system.

PO Box 490
7 Creswell Drive
Trenton, Ontario K8V 5R6

www.city.quintewest.on.ca

Telephone: (613) 392-2841
FAX: (613) 392-7151
chrisa@city.quintewest.on.ca

www.quintewestmaps.com

SITE Selection CANADA • BEST TO INVEST

NOTICE OF PROJECT DESIGN COMPLETION

CITY OF QUINTE WEST
BATAWA-FRANKFORD WATER LINK

Quinte West is responsible for the provision of potable water to the community of Batawa. Due to the age and physical condition of the Water Treatment Plant in Batawa, the City had a Needs Study completed. The recommendations were:

1) Extend a watermain approximately 3.2 km from Frankford, in order to provide drinking water to Batawa from the Frankford Water Treatment Plant, and decommission the existing Batawa Water Treatment Plant;
2) Provide a SCADA communications link between the Batawa and Frankford facilities to improve reliability and reduce operations requirements.

The project is proceeding under schedule "B" of the Municipal Class Environmental Assessment Process. The design work has been substantially completed.

For further information on this project, please contact:

Mr. Tony Guerrera
The Greer Galloway Group Inc.
Engineers and Planners
1620 Wallbridge Loyalist Road
Belleville, Ontario
K8N 4Z5
T: (613)966-3068
F: (613)966-3087

Mr. Chris Angelo
Director of Public Works
City of Quinte West
7 Creswell Drive
P.O. Box 490
Trenton, Ontario
K8V 5R6
T: (613)392-2841
F: (613)392-7151

This notice issued February 4th, 2010.

DOCUMENTATION OF DEVIATIONS FROM PROVINCIAL MAPPING SYMBOLOGY REQUIREMENTS			
Data Set Description	**Symbology Specification**	**TCC Specification**	**Rational for Change**
Waterbody	Blue line around polygon	Take off blue outline	Outline makes the map difficult to read in the northern areas and colour is too similar to gray when printed
Watercourse	Not included in symbology document	Same colour as Waterbody	At regional scale lines help visibility
Roads	Gray colour	Same thickness but change colour to red	Too much grey on map
Municipal Boundaries	Dashed Grey line	Solid grey	When both upper tier and lower tier boundary used the line turns into a solid gray and not dashed
Watershed Boundary	Blue	Black	To make more visible
Settlements	Black outline	Black square for base layer in Region maps and Salmon colour with no outline for areas of settlement	For Visibility
Drinking Water Symbols – Large and Small Municipal	Gray symbol	Symbol same, but changed color to yellow and green	To distinguish between surface and groundwater
Drinking Water systems 3-8	Gray symbol	Symbol same but changed from gray to yellow	To illustrate differences
Monitoring stations	Hollow Triangles	Changed to filled triangles	To be visible on regional maps
Dams	Black line polygons	Red Squares point file	Black line was not showing up at regional scale
Private Water Well	Size 12	Size 4	To have more wells be visible
Climate Stations EC	None in document	Pentagon colour in red	N/A
Climate Stations CA	None in document	Pentagon colour in Solar Yellow	N/A
Proposed Meterological Zone 1	None in document	Line (RGB) 0, 255, 195 width 2	N/A
Proposed Meterological Zone 2	None in document	Line (RGB) 230, 0, 168 width 2	N/A
Transport Pathways (Linear Feature)	None in document	Line – single alternating dashed line (RGB) 178, 178, 178, and 0, 0, 0 width 2	N/A
IPZ – 3b	None in document	Mango (RGB)255, 211, 127	N/A
IPZ – 3c	None in document	(RGB) 205, 203, 245	N/A
Observation wells and Sentry wells	Used Well type Ⅰ Used well type Ⅱ	Point (RGB) 0, 92, 230 size 10, subscript i, ii	No specific symbology for well types
Non-Municipal Stressed Subwatershed	None	10% crosshatch	Overlay on MOE stress level fill symbol

APPENDIX B

OTHER DRINKING WATER SYSTEMS

OTHER DRINKING WATER SYSTEMS

- Tables of Other Drinking Water Systems
  - Crowe Valley Source Protection Area
  - Kawartha-Haliburton Source Protection Area
  - Lower Trent Source Protection Area
  - Otonabee-Peterborough Source Protection Area

APPENDIX B: Other Drinking Water Systems

Kawartha-Haliburton Source Protection Area

System Name	Drinking Water Information System No.[1]	City	County District	Operating Authority
Small Municipal Non-Residential				
Algonquin Highlands Township Complex	260032110	Algonquin Highlands	Algonquin Highlands	The Corporation of the Algonquin Highlands
Blackstock Old Town Hall	260050258	Blackstock	Scugog	The Corporation of the Township of Scugog
Burnt River Snack Booth	260072891	Burnt River	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Club 35	260032097	Algonquin Highlands	Algonquin Highlands	The Corporation of the Algonquin Highlands
Curling/Squash Club	260028405	Haliburton	Dysart et al	The Municipality of Dysart et al
Dorset Lookout Tower	260032136	Algonquin Highlands	Algonquin Highlands	The Corporation of the Algonquin Highlands
Dorset Recreation Centre	260025753	Kawartha Lakes	Kawartha Lakes	The Corporation of the Algonquin Highlands
Dysart Municipal Office And Library	260028418	Haliburton	Dysart et al	The Municipality of Dysart et al
Fenelon Township Community Centre Cistern System	260084474	Cambray	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Gooderham Post Office/ Municipal Office	260029302	Gooderham	Highlands East	The Corporation of The Municipality Highlands East
Haliburton Medical Centre	260067535	Haliburton	Dysart et al	The Municipality of Dysart et al
Heritage Centre	260038792	Bobcaygeon	Galway-Cavendish-Harvey	The Corporation of Galway-Cavendish-Harvey
Kinmount District Health Centre	260086242	Kinmount	Galway-Cavendish-Harvey	The Corporation of Galway-Cavendish-Harvey
Oxtongue Community Centre	260032123	Algonquin Highlands	Algonquin Highlands	The Corporation of the Algonquin Highlands
Rails End Gallery	260028379	Haliburton	Dysart et al	The Municipality of Dysart et al
Scugog Island Hall	260050232	Port Perry	Scugog	The Corporation of the Township of Scugog
Scugog Shores Historical Museum	260059228	Port Perry	Scugog	The Corporation of the Township of Scugog
Seagrave Club House	260050271	Seagrave	Scugog	The Corporation of the Township of Scugog
Stanhope Airport	260032084	Algonquin Highlands	Algonquin Highlands	The Corporation of the Algonquin Highlands
Utica Memory Hall	260050206	Port Perry	Scugog	The Corporation of the Township of Scugog
Wilberforce	260007790	Wilberforce	Highlands East	The Corporation of the Municipality Highlands East
Baddow Community Centre	735002393*	Coboconk	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Bethany Service Centre/Library	735001341*	Bethany	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Burnt River Community Centre	83508AA4f*	Burnt River	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Burnt River Fire Hall/Library	735001344*	Burnt River	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Coboconk Medical Centre	735002070*	Coboconk	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Coboconk Service Centre/Library/Recreation Centre	735001070*	Kawartha Lakes	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Coboconk Train Station	735002379*	Coboconk	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Coronation Hall	735000237*	Kawartha Lakes	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Emily/Omemee Community	735002382*	Omemee	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Fenelon Township Community Centre	735003426*	Lindsay	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Kinmount Library	735001409*	Kinmount	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Lindsay Airport - Café and Terminal	735001340*	Lindsay	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Little Britain Community Centre	735002383*	Little Britain	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Manvers Community Centre	735002392*	Bethany	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Norland Recreation Centre	735002378*	Norland	Kawartha Lakes	The Corporation of the City of Kawartha Lakes

System Name	Drinking Water Information System No.[1]	City	County District	Operating Authority
Omemee Beach Park Washrooms	735001676*	Omemee	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Ops Community Centre	735002380*	Lindsay	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Palestine Community Centre	735002386*	Woodville	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Valentia Ball Park	735005320*	Bexley	Kawartha Lakes	The Corporation of the City of Kawartha Lakes
Non-Municipal Seasonal Residential				
Caygeon Cove Resort	260082979	Bobcaygeon	Galway-Cavendish-Harvey	2115791 Ontario Ltd O/A Caygeon Cove Resort
Nogies Creek Resort	260069862	Bobcaygeon	Galway-Cavendish-Harvey	Ncr Properties Inc.
Lilac Lodge Trailer Park	260038415	Bobcaygeon	Kawartha Lakes	Lilac Lodge Trailer Park Ltd.
Birch Cove Campgrounds WTP	260041808	Bobcaygeon	Kawartha Lakes	Birch Cove Campgrounds Inc.
Lakeview Cottages & Trailer Park WTP	260085059	Cameron	Kawartha Lakes	1165996 Ontario Inc. & O/A Lakeview Cottages
Islandview Trailer Park WTP	260007647	Coboconk	Kawartha Lakes	Island View Trailer Park
Arkadia Trailer Park WTP	260028587	Fenelon Falls	Kawartha Lakes	Jackson Water Conditioning Limited
Cedar Valley South	260049166	Kawartha Lakes	Kawartha Lakes	R & E Hartmann Inc.
Cedar Valley North	260049296	Kawartha Lakes	Kawartha Lakes	R & E Hartmann Inc.
Layzee Acres Park	260019812	Kawartha Lakes	Kawartha Lakes	Layzee Acres Park
Double M Rv Resort And Campground	260026052	Kawartha Lakes	Kawartha Lakes	Double "M" Rv Resort & Campground
Campinn Inc.	260026845	Kawartha Lakes	Kawartha Lakes	Campinn Incorporated
Nestle-In Park	260032656	Kawartha Lakes	Kawartha Lakes	Nestle-In Park Inc.
Trailer Park On The Bay	260034762	Kawartha Lakes	Kawartha Lakes	Trailer Park On The Bay Inc.
Lancaster Cottage And Trailer Resort	260035100	Kawartha Lakes	Kawartha Lakes	Lancaster Cottage And Trailer Resort
Beaver Park	260038454	Kawartha Lakes	Kawartha Lakes	M+K's Beaver Trailer Park Limited
Sunny Acres Resort	260039468	Kawartha Lakes	Kawartha Lakes	Sunny Acres Resort
Green Acres Trailer Park (Bobcaygeon)	260040222	Kawartha Lakes	Kawartha Lakes	J & J Mcbride Enterprises Inc.
Balsam Lake Trailer Park	260046787	Kirkland	Kawartha Lakes	926704 Ontario Ltd.
Cedar Valley Park	260068666	Lindsay	Kawartha Lakes	532908 Ontario Limited
Pigeon Lake Trailer Park	260032669	Omemee	Kawartha Lakes	Castle Resort Parks Inc.
Northern Eagle Trailer Park WTP	260061620	Minden	Minden Hills	Northern Eagle Campers Association
Miners' Bay Lodge WTP	260029003	Minden Hills	Minden Hills	Miners' Bay Lodge Ltd.
Jay Lake Campground	260032331	Minden Hills	Minden Hills	749974 Ontario Inc.
Goreski's Lakeside Recreation Restaurant	260034281	Scugog	Scugog	Goreski Summer Resort Limited
Goreski's Lakeside Recreation 800	260034294	Scugog	Scugog	Goreski Summer Resort Limited
Goreski's Lakeside Recreation Campers	260034307	Scugog	Scugog	Goreski Summer Resort Limited
Goreski's Lakeside Recreation	260034320	Scugog	Scugog	Goreski Summer Resort Limited
West Shore Marine	260042913	Scugog	Scugog	86893 Canada Ltd.
Non-Municipal Year-Round Residential				
Echo Hills	260019695	Haliburton	Dysart et al	Ontario Clean Water Agency
458385 Ontario Inc.	260076336	Haliburton	Dysart et al	458385 Ontario Inc.
Ashley Hope Apartments	260076791	Haliburton	Dysart et al	W.A.O.I Investments Inc.
1012 Harburn Road	260074191	Haliburton	Dysart et al	1297159 Ontario Inc.
Fenelon Valley Trailer Park	260073047	Fenelon Falls	Kawartha Lakes	6865038 Canada Limited
Mountainview	260005021	Haliburton	Kawartha Lakes	Ontario Clean Water Agency
Kennedy Bay Communal	260007595	Kawartha Lakes	Kawartha Lakes	Verabay Investments Limited
Riverwood Mobile Homes Estates	260038532	Kawartha Lakes	Kawartha Lakes	Wagstaff Riverwood Limited

System Name	Drinking Water Information System No.[1]	City	County District	Operating Authority
Joy Vista Estates	260033995	Kawartha Lakes	Kawartha Lakes	Joy Vista Estates Inc.
Pleasant View Park	260042341	Kawartha Lakes	Kawartha Lakes	Macal Properties Ltd.
Stoney Creek Trailer Park	260037843	Kawartha Lakes	Kawartha Lakes	Stoney Creek Trailer Park
Hillset Apartments	260031005	Little Britain	Kawartha Lakes	Hillset Apartments
Cottingham Court	260005034	Omemee	Kawartha Lakes	Ontario Clean Water Agency
Kinark Outdoor Centre	260018486	Minden Hills	Minden Hills	Kinark Child And Family Services
Hunter Creek Estates	260071877	Minden Hills	Minden Hills	Orkin/Pco Service Corp
14011 Old Scugog Road	260045396	Blackstock	Scugog	John Green Electric Limited
Gerrow Beach Water Supply	260071825	Port Perry	Scugog	Gerrow Beach Water Supply And Maintenance Co
Shels Wood Water Cooperative Inc	260021567	Scugog	Scugog	Shels Wood Water Cooperative Inc.
Small Non-Municipal Non-Residential				
Moorelands Camp WTP	260026897	Algonquin Highlands	Algonquin Highlands	Moorelands Community Service
Zion United Church	260028652	Algonquin Highlands	Algonquin Highlands	United Church Of Canada (Zion - Council)
Point In Time	260087386	Haliburton	Algonquin Highlands	Point in Time Centre for Children, Youth and Parents
Chalet By-The-Lake Bed & Breakfast	260053911	Haliburton	Algonquin Highlands	Chalet By-The-Lake Bed & Breakfast
Maple Lake United Church	260058721	Haliburton	Algonquin Highlands	Maple Lake United Church
Kinsman's Cottages	260073177	Minden	Algonquin Highlands	Kinsman's Cottages
Oakview Lodge And Marina WTP	260051545	Minden	Algonquin Highlands	Oakview Lodge And Marina
Shalom By The Lake Cottages And Retreat Centre	260059176	Minden	Algonquin Highlands	Shalom By The Lake Cottages And Retreat Centre
Pioneer Gas Station #205	260058292	Manilla	Brock	Pioneer Petroleum's Management Inc.
Maple Creek Christian Ranch Recreation Hall Well	260047216	Cavan	Cavan-Millbrook-North Monaghan	Maple Creek Christian Ranch
Rhubarb Restaurant	260087542	Dysart	Dysart et al	Rhubarb Restaurant
Stuart Baker Elementary School	260011544	Dysart	Dysart et al	Trillium Lakeland District School Board
Haliburton Highlands Health Services	260015184	Dysart	Dysart et al	Haliburton Highlands Health Services
Sir Sam's Inn WTP	260082381	Eagle Lake	Dysart et al	Sir Sam's Inn Inc.
Medeba Bible Camp	260025688	Guilford	Dysart et al	Medeba Bible Camp Inc.
Medeba Bible Camp (Washroom Building)	260026429	Guilford	Dysart et al	Medeba Bible Camp Inc.
Chandler Point WTP	260029939	Haliburton	Dysart et al	Chandler Point Cottage Owners Association
Sunrise Terrace Bed & Breakfast	260053781	Haliburton	Dysart et al	Sunrise Terrace Bed & Breakfast
Coach Light B & B	260054522	Haliburton	Dysart et al	Coach Light Bed & Breakfast
Lakeview Motel & Restaurant	260056745	Haliburton	Dysart et al	Lakeview Motel
Todd's Independent Store	260066612	Haliburton	Dysart et al	Todd's Independent Store
Fleming College - Haliburton	260073333	Haliburton	Dysart et al	Sir Sandford Fleming College
Martinwood Resort	260087061	Haliburton	Dysart et al	Tnp Canada
Halimar Resort	260035178	Haliburton	Dysart et al	739473 Ontario Limited
Willow Beach Cottages WTP	260053521	Haliburton	Dysart et al	Willow Beach Cottages
The Moose Lodge	260049647	Haliburton	Dysart et al	Wigamog Inn Limited
Wigamog Inn Distribution System	260049803	Haliburton	Dysart et al	Wigamog Inn Development Corporation
Wigamog Villas WTP	260050180	Haliburton	Dysart et al	Wigamog Inn Development Corporation
Kashaga Lodge	260087321	Haliburton	Dysart et al	Kahsaga Lodge
Down Home B & B	260051805	Haliburton	Dysart et al	Jim And Marilyn Frost O/A Down Home B & B
Haliburton Iga	260085007	Haliburton	Dysart et al	1511375 Ontario Limited
Highland Stone Cottage Bed & Breakfast	260052936	Haliburton	Dysart et al	Highland Stone Cottage Bed & Breakfast

System Name	Drinking Water Information System No.[1]	City	County District	Operating Authority
Haliburton United Church	260052611	Haliburton	Dysart et al	Haliburton United Church
Highland Community Learning Centre	260021021	Haliburton	Dysart et al	Darren Lambert
Lady Esther Esthetics Day Spa and B & B	260054301	Haliburton	Dysart et al	Lady Esther Esthetics Day Spa And B & B
Cc's Suds And Grub	260061880	Haliburton	Dysart et al	Cc's Suds And Grub
Swiss Acres B & B	260052559	Haliburton	Dysart et al	Swiss Acres B & B
J D Hodgson Elementary School	260011388	Haliburton	Dysart et al	Trillium Lakeland District School Board
West Guilford Gospel Chapel	260084435	West Guilford	Dysart et al	West Guilford Gospel Chapel
Meadow Wood Bed & Breakfast	260052819	West Guilford	Dysart et al	Meadow Wood Bed & Breakfast
Y.M.C.A. Wanakita (Core System) WTP	260036738	Haliburton	Highlands East	YMCA Wanakita Branch - Hamilton/Burlington
Y.M.C.A. Wanakita (Health Care System) WTP	260036751	Haliburton	Highlands East	YMCA Wanakita Branch - Hamilton/Burlington
Y.M.C.A. Wanakita (Longhouse System) WTP	260036764	Haliburton	Highlands East	YMCA Wanakita Branch - Hamilton/Burlington
Y.M.C.A. Wanakita (Eastside System) WTP	260036777	Haliburton	Highlands East	YMCA Wanakita Branch - Hamilton/Burlington
Bark Lake Leadership And Conference Centre Water	260007634	Irondale	Highlands East	Asi Group
Bethany Hills School	260015262	Bethany	Kawartha Lakes	Bethany Hills School
Saddlewood Camp Distribution System	260079482	Bethany	Kawartha Lakes	Saddlewood Incorporated
Elbow Skiing Limited	260066313	Bethany	Kawartha Lakes	Elbow Skiing Limited
Lakeview Arts Barn	260070187	Bobcaygeon	Kawartha Lakes	1665943 Ontario Ltd O/A Lakeview Arts Barn
Fergies Fries	260087932	Bobcaygeon	Kawartha Lakes	Fergies Fries
Royal Canadian Legion Branch 519	260082303	Coboconk	Kawartha Lakes	Royal Canadian Legion
Gil-Mar Cottage Resort Treatment Plant	260085618	Dunsford	Kawartha Lakes	Gil-Mar Cottage Resort
Stop 36 Restaurant Cistern System	260084955	Dunsford	Kawartha Lakes	Stop 36 Restaurant
River View Cottages Water Treatment Plant	260083395	Fenelon Falls	Kawartha Lakes	River View Cottages
Shiloh Christian Centre	260084058	Fenelon Falls	Kawartha Lakes	Shiloh Christian Centre
Wolf Run Golf Club	260049855	Janetville	Kawartha Lakes	Viewlake Investment Corporation
Community Living Durham North (Janetville)	260068731	Janetville	Kawartha Lakes	Durham North Community Living
Dr. George Hall Public School	260011271	Kawartha Lakes	Kawartha Lakes	Trillium Lakeland District School Board
Scott Young Public School	260011531	Kawartha Lakes	Kawartha Lakes	Trillium Lakeland District School Board
Lady Eaton Elementary School	260011427	Kawartha Lakes	Kawartha Lakes	Trillium Lakeland District School Board
Mariposa Elementary School	260011453	Kawartha Lakes	Kawartha Lakes	Trillium Lakeland District School Board
Jack Callaghan Public School	260011401	Kawartha Lakes	Kawartha Lakes	Trillium Lakeland District School Board
Hawk Homes	260017784	Kawartha Lakes	Kawartha Lakes	Hrcat Homes Inc
Chimo Youth And Family Services Spruce Hill Residence	260016549	Kawartha Lakes	Kawartha Lakes	Chimo Youth And Family Services Inc
Bethany United Church	260025350	Kawartha Lakes	Kawartha Lakes	Bethany United Church
Little Britain Baptist Church	260025844	Kawartha Lakes	Kawartha Lakes	The Little Britain Community Baptist Church
Dunsford United Church	260025870	Kawartha Lakes	Kawartha Lakes	United Church Of Canada (Dunsford)
Pontypool Community Centre	260025935	Kawartha Lakes	Kawartha Lakes	Pontypool Community Centre
Mill Stream Bible Retreat Centre	260035984	Kawartha Lakes	Kawartha Lakes	Mill Stream Bible Retreat Centre
St. Luke's School	260014300	Kawartha Lakes	Kawartha Lakes	Peterborough V.N.C. Cdsb
Fenelon Township Public School	260011297	Kawartha Lakes	Kawartha Lakes	Trillium Lakeland District School Board
Dunsford District Elementary School	260011284	Kawartha Lakes	Kawartha Lakes	Trillium Lakeland District School Board
Eganridge Inn	260086008	Kawartha Lakes	Kawartha Lakes	Eganridge Inn
Wyatt Residence	260016133	Kawartha Lakes	Kawartha Lakes	Matthew Wyatt
Mariposa Group Home	260008476	Kawartha Lakes	Kawartha Lakes	Central Seven Association For Community Living

System Name	Drinking Water Information System No.[1]	City	County District	Operating Authority
Ridgewood Public School	260011492	Kawartha Lakes	Kawartha Lakes	Trillium Lakeland District School Board
Lady Mackenzie Public School	260011440	Kawartha Lakes	Kawartha Lakes	Trillium Lakeland District School Board
Chimo Youth And Family Services Wintergreen/School	260016562	Kinmount	Kawartha Lakes	Chimo Youth And Family Services Inc.
Highlands Cinemas	260072410	Kinmount	Kawartha Lakes	Highlands Cinemas
Kawartha Lakes Inn	260071253	Lindsay	Kawartha Lakes	Kawartha Lakes Inn Inc.
Cornerstone Child Care Learning Centre	260075686	Lindsay	Kawartha Lakes	Cornerstone Child Care Learning Centre
Admiral Inn & Conference Centre	260052481	Lindsay	Kawartha Lakes	1496950 Ontario Ltd.
Century Theatre Services (Pigeon Lake Road)	260081484	Lindsay	Kawartha Lakes	1185437 Ontario Limited O/A Century Theatre
Country Estates Retirement Home Cistern System	260074230	Lindsay	Kawartha Lakes	1088416 Ontario Inc.
Keast Home For Special Care	260016107	Lindsay	Kawartha Lakes	Marie Keast
Robert E Flood Farm Ltd.	260086359	Little Britain	Kawartha Lakes	Robert E Flood Farm Ltd.
Northern Heights Resorts WTP	260045201	Norland	Kawartha Lakes	Northern Heights Resorts Limited
Trinity United Church	260025766	Omemee	Kawartha Lakes	Trinity United Church
Knox (Glenarm) Presbyterian Church	260063063	Woodville	Kawartha Lakes	Knox (Glenarm) Presbyterian Church
Peniel United Church	260063622	Woodville	Kawartha Lakes	Peniel United Church
Mill Pond Restaurant WTP	260052494	Carnarvon	Minden Hills	Mill Pond Restaurant
William's Landing One	260032461	Haliburton	Minden Hills	William's Landing Cottage Owners Association
William's Landing Two	260032474	Haliburton	Minden Hills	William's Landing Cottage Owners Association
William's Landing Four	260032500	Haliburton	Minden Hills	William's Landing Cottage Owners Association
Lakeview Lodge Cottages	260083148	Haliburton	Minden Hills	Lakeview Lodge Cottages
Ingoldsby United Church	260063895	Ingoldsby	Minden Hills	Ingoldsby United Church
Mountain Lake Lakeside B & B	260052221	Minden	Minden Hills	Mountain Lake Lakeside Bed And Breakfast
Heather Lodge WTP	260052429	Minden	Minden Hills	Heather Lodge Ltd.
Carnarvon Bowling	260052546	Minden	Minden Hills	1444089 Ontario Ltd.
Stouffer Mills B & B	260052663	Minden	Minden Hills	Stouffer Mill B & B
Ruby's Cottage Resort WTP	260052949	Minden	Minden Hills	Ruby's Cottage Resort
Buttermilk Falls Resort	260052975	Minden	Minden Hills	Eric Christensen et al
The Pepper Mill Steak & Pasta House	260053963	Minden	Minden Hills	The Pepper Mill Steak & Pasta House
Silver Birches Resort (Minden)	260081068	Minden	Minden Hills	Silver Birches Resort
Hunter Creek Inn WTP	260085280	Minden	Minden Hills	Hunter Creek Inn
Wagon Wheel Motel And Restaurant	260084981	Minden	Minden Hills	Wagon Wheel Motel And Restaurant
Kash Landing Cafe	260083564	Minden	Minden Hills	Kash Landing Cafe
Whitewater Ontario	260088738	Minden	Minden Hills	Whitewater Ontario
Highlands Motel (Motel And Residence)	260028834	Minden	Minden Hills	The Highlands Motel
That Place In Carnarvon Restaurant WTP	260052845	Minden	Minden Hills	2029157 Ontario Ltd
Camp Kawabi Water Treatment Plant	260044252	Minden	Minden Hills	Camp Kawabi Limited
Pine Springs Camp	260021008	Minden Hills	Minden Hills	University Of Toronto
Kilcoo Camp Water Treatment Plant	260028106	Minden Hills	Minden Hills	Peggy Latimer
Highlands Motel (Recreation Hall)	260028847	Minden Hills	Minden Hills	The Highlands Motel
Camp WTP	260039325	Minden Hills	Minden Hills	Boy Scouts Of Canada
Ogopogo Resort	260044278	Minden Hills	Minden Hills	1548282 Ontario Ltd.
Haliburton Congregation Of Jehovah's Witnesses	260074360	Minden Hills	Minden Hills	Haliburton Congregation Of Jehovah's Witnesses
Noble Motel And Restaurant	260081952	Norland	Minden Hills	Noble Motel And Restaurant

System Name	Drinking Water Information System No.[1]	City	County District	Operating Authority
San-Man Motel	260060450	Port Perry	Scugog	Sea Tide Investments Ltd O/A San-Man Motel
Scugog Island United Church	260081380	Port Perry	Scugog	Scugog Island United Church
Sunnybrae Golf Course	260072345	Prince Albert	Scugog	814834 Ontario Inc.
Epsom Public School	260015340	Scugog	Scugog	Durham District School Board
Burketon Group Home	260008463	Scugog	Scugog	Central Seven Association For Community Living
Camp Ademac –Summer	260037960	Scugog	Scugog	Girl Guides Of Canada
Camp Ademac - Winter	260037973	Scugog	Scugog	Girl Guides Of Canada
Camp Scugog	260040742	Scugog	Scugog	Toronto United Church Council
Golfer's Dream	260061789	Scugog	Scugog	Please Save And Recycle Ltd.
Nonquon Oeec (David Carroll Room)	260015379	Scugog	Scugog	Durham District School Board
Nonquon Oeec (Pheasant Pen) Cistern System	260015392	Scugog	Scugog	Durham District School Board
Seagrave United Church	260055315	Seagrave	Uxbridge	Seagrave United Church

[1] Numbers marked with asterisks are the Small Drinking Water Systems (SDWS) identification number

Otonabee-Peterborough Source Protection Area

System Name	Drinking Water Information System No.	City	County District	Operating Authority
Small Municipal Non-Residential				
Westwood Public Library Well Supply	260025116	Asphodel-Norwood	Asphodel-Norwood	Asphodel - Norwood, The Corporation Of The Municipality Of
R252 Douro Park Water Treatment Plant	260029640	Douro-Dummer	Douro-Dummer	Douro-Dummer, The Township Of
R252 Warsaw Fire Hall Well Supply	260029679	Douro-Dummer	Douro-Dummer	Douro-Dummer, The Township Of
R252 Douro Community And Recreational Centres Well Supply	260029705	Douro-Dummer	Douro-Dummer	Douro-Dummer, The Township Of
R252 Douro-Dummer Library Well Supply	260029718	Douro-Dummer	Douro-Dummer	Douro-Dummer, The Township Of
R252 Township Of Dummer (Office Building) Well Supply	260025103	Warsaw	Douro-Dummer	Douro-Dummer, The Township Of
R252 Buckhorn Regional Health Centre Well Supply	260088153	Buckhorn	Galway-Cavendish-Harvey	Buckhorn Regional Health Centre
R252 Deer Bay Hall Well Supply	260038844	Lakefield	Galway-Cavendish-Harvey	Galway-Cavendish-Harvey, The Corporation Of
R252 Cavendish Policing And Fire Hall Well Supply	260038857	Buckhorn	Galway-Cavendish-Harvey	Galway-Cavendish-Harvey, The Corporation Of
R252 Apsley Medical Centre Well Supply	260035581	North Kawartha	North Kawartha	North Kawartha, The Township Of
R252 Community Policing Well Supply	260035594	North Kawartha	North Kawartha	North Kawartha, The Township Of
R252 Apsley Public Library Well Supply	260035607	North Kawartha	North Kawartha	North Kawartha, The Township Of
R252 Council Chambers Well Supply	260035620	North Kawartha	North Kawartha	North Kawartha, The Township Of
R252 Community Care Well Supply	260035633	North Kawartha	North Kawartha	North Kawartha, The Township Of
R252 Glen Alda Community Centre Well Supply	260035646	North Kawartha	North Kawartha	North Kawartha, The Township Of
R252 Lang Pioneer Village Food Booth Well Supply	260033163	Otonabee-South Monaghan	Otonabee-South Monaghan	Lang Pioneer Village (County Of Peterborough)
R252 Otonabee-South Monaghan Fire Head Quarters Well Supply	260053677	Keene	Otonabee-South Monaghan	Otonabee-South Monaghan, Corporation Of The
R252 Otonabee-South Monaghan Municipal Office Well Supply	260053664	Keene	Otonabee-South Monaghan	Otonabee-South Monaghan, Corporation Of The
R252 Lions Medical Centre Well Supply	260053703	Keene	Otonabee-South Monaghan	Otonabee-South Monaghan, Corporation Of The
R252 Lang Pioneer Village Main Well Supply	260031070	Keene	Otonabee-South Monaghan	Peterborough, The County Of
R252 Villiers Community Hall Well Supply	260053716	Keene	Otonabee-South Monaghan	Otonabee-South Monaghan, Corporation Of The
R252 Keene Library Well Supply	260053755	Keene	Otonabee-South Monaghan	Otonabee-South Monaghan, Corporation Of The
R252 Bailieboro Library Well Supply	260053768	Bailieboro	Otonabee-South Monaghan	Otonabee-South Monaghan, Corporation Of The
R252 Memorial Community Centre Well Supply	260057837	Keene	Otonabee-South Monaghan	Otonabee-South Monaghan, Corporation Of The
R252 Bridgenorth Firehall #1 - Library (Smith-Ennismore-Lakefield) Well Supply	260033410	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield, The Corporation
R252 Municipal Office (Smith-Ennismore-Lakefield) Well Supply	260033423	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield, The Corporation O
R252 Ennismore Recreation Complex Well Supply	260035802	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield, The Corporation
Non-Municipal Year-Round Residential				
Evergreen Acres Well Supply	260075023	Fraserville	Cavan-Millbrook-North Monaghan	Yanto Enterprises Limited
The Landing Condominiums Water Treatment Plant	260086476	Apsley	North Kawartha	890353 Ontario Limited
Mcfadden Road Well Supply	260005047	North Kawartha	North Kawartha	Peterborough Housing Corporation

System Name	Drinking Water Information System No.	City	County District	Operating Authority
Small Municipal Non-Residential				
Chyler Court Apartments Well Supply	260084162	Apsley	North Kawartha	Mark, Terrance & Stephanie Lippert
Shady Acres Cottages And Trailer Park Water Supply	260039273	Keene	Otonabee-South Monaghan	Parkbridge Lifestyle Communities Inc.
Park Hill Estates Well Supply	260026949	Otonabee-South Monaghan	Otonabee-South Monaghan	Park Hill Estates
Fraserville Glen Water Treatment Plant	260087139	Fraserville	Otonabee-South Monaghan	Team Aquatic Management Group Of Companies
945 Sharon Court Well Supply	260073957	Bridgenorth	Smith-Ennismore-Lakefield	1501451 Ontario Limited
949 Sharon Court Well Supply	260074035	Bridgenorth	Smith-Ennismore-Lakefield	1501450 Ontario Limited
Markou Well Supply	260076622	Bridgenorth	Smith-Ennismore-Lakefield	Marilyn Markou
Mark Elstone Apartments Well Supply	260076362	Bridgenorth	Smith-Ennismore-Lakefield	Mark Andrew Elstone
Non-Municipal Seasonal Residential				
R252 Stoney Point Trailer Park Well Supply	260027313	Asphodel-Norwood	Asphodel-Norwood	Stoney Point Trailer Park Inc.
R252 Dreamland Resort Well Supply	260028574	Asphodel-Norwood	Asphodel-Norwood	Dreamland Resort (Albert/ Zita Crowley)
R252 Pine Vista Resort (Well 3) Well Supply	260070343	Lakefield	Douro-Dummer	Pine Vista Resort
R252 Elim Lodge (Log House) Well Supply	260031577	Peterborough	Galway-Cavendish-Harvey	Elim Ministries Inc. (Elim Lodge)
R252 Elim Lodge (Kitchen) Well Supply	260031590	Peterborough	Galway-Cavendish-Harvey	Elim Ministries Inc. (Elim Lodge)
R252 Melody Bay Resort Well Supply	260081783	Lakefield	Galway-Cavendish-Harvey	Parkbridge Lifestyle Communities Inc.
R252 Pilgrim'S Rest Campground Water Treatment Plant	260034671	Lakefield	North Kawartha	Pilgrim'S Rest Campground (Lesley Holder)
R252 Long Lake Lodge Cottages & Trailer Park Water Treatment Plant	260052884	Apsley	North Kawartha	Long Lake Lodge Ltd.
R252 Whispering Pines Cottages Water Treatment Plant	260055250	Keene	Otonabee-South Monaghan	1191936 Ontario Inc.
R252 Bensfort Bridge Resort Well Supply	260028691	Otonabee-South Monaghan	Otonabee-South Monaghan	Bensfort- Bridge Resort
R252 Highland View Resort Water Treatment Plant	260031057	Otonabee-South Monaghan	Otonabee-South Monaghan	Highland View Resort
R252 Godfrey'S Cottages And Trailer Park Well #1	260068887	Keene	Otonabee-South Monaghan	Godfrey'S Cottages And Trailer Park
R252 Godfrey'S Cottages & Trailer Park Well #2	260069784	Keene	Otonabee-South Monaghan	Godfrey'S Cottages & Trailer Park
R252 Southview Cottages Well Supply	260065637	Bailieboro	Otonabee-South Monaghan	Southview Cottages Inc.
R252 Silverleaf Cottages Well Supply	260082758	Bailieboro	Otonabee-South Monaghan	Silverleaf Cottages
R252 Theona Park On Buckhorn Well Supply	260026000	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Theona Park On Buckhorn
R252 Sandshell Trailer Park Well Supply	260026702	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Sandshell Trailer Park
R252 Pioneer Park Camping Resort And Marina (Lakefield) Well Supply	260033982	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Pioneer Park Camping Resort And Marina
R252 Bailey'S Bay Resort Well Supply	260036283	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Bailey'S Bay Resort Limited
R252 Skyline Park Water Treatment Plant	260028626	Ennismore	Smith-Ennismore-Lakefield	Skyline Park (Graham Perkins)
R252 Grandview Park Campground Well Supply	260074594	Ennismore	Smith-Ennismore-Lakefield	Grandview Park Ltd.
R252 Gail Park (Front Park) Well Supply	260082940	Ennismore	Smith-Ennismore-Lakefield	Gail Park Cottager'S Association
R252 Gail Park (Back Park) Water Treatment Plant	260083005	Ennismore	Smith-Ennismore-Lakefield	Gail Park Cottager'S Association
R252 Islandview Resort Water Treatment Plant	260031785	Youngs Point	Smith-Ennismore-Lakefield	Keith Archer
R252 Springrock Tent And Trailer Park Well Supply	260045773	Youngs Point	Smith-Ennismore-Lakefield	Springrock Tent And Trailer Park

System Name	Drinking Water Information System No.	City	County District	Operating Authority
Small Municipal Non-Residential				
R252 Donro Trailer Park Well Supply	260045318	Ennismore	Smith-Ennismore-Lakefield	Donro Trailer Park
R252 Stricker'S Resort Trailer Park & Cottage Water Treatment Plant	260053365	Lakefield	Smith-Ennismore-Lakefield	Stricker's Resort Inc.
Small Non-Municipal Non-Residential				
North Cavan Public School Well Supply	260011115	Cavan-Millbrook-North Monaghan	Cavan-Millbrook-North Monaghan	Kawartha Pine Ridge Dsb
Oakwood House Well Supply	260018356	Cavan-Millbrook-North Monaghan	Cavan-Millbrook-North Monaghan	Oakwood House
Kawartha Lakes Bible College (Residence Building) Well Supply	260042419	Cavan-Millbrook-North Monaghan	Cavan-Millbrook-North Monaghan	Kawartha Lakes Bible College Inc.
Kawartha Lakes Bible College (Main Building) Well Supply	260042432	Cavan-Millbrook-North Monaghan	Cavan-Millbrook-North Monaghan	Kawartha Lakes Bible College Inc.
Christian Horizons Peterborough 7 Well Supply	260018928	Cavan-Millbrook-North Monaghan	Cavan-Millbrook-North Monaghan	Christian Horizons
R252 Pinto'S Corner Well Supply	260072072	Peterborough	Cavan-Millbrook-North Monaghan	Pinto Group Canada
R252 Peterborough Curling Club Well Supply	260065377	Peterborough	Cavan-Millbrook-North Monaghan	Peterborough Curling Club
Stewart Homes - Sherbrooke Residence Well Supply	260072696	Peterborough	Cavan-Millbrook-North Monaghan	Kevin Stammis
Crestwood Secondary School Well Supply	260010946	Cavan-Millbrook-North Monaghan	Cavan-Millbrook-North Monaghan	Kawartha Pine Ridge Dsb
R252 Mustang Drive-In Well Supply	260060801	Peterborough	Cavan-Millbrook-North Monaghan	Mustang Drive-In
R252 Pioneer Gas Station #202 Well Supply	260058188	Springville	Cavan-Millbrook-North Monaghan	Pioneer Petroleums Management Inc.
R252 Kawartha Downs Well Supply	260007257	Fraserville	Cavan-Millbrook-North Monaghan	Kawartha Downs Ltd.
R252 Emmanuel United Church Bailieboro Well Supply	260072462	Bailieboro	Cavan-Millbrook-North Monaghan	Emmanuel United Church
St. Joseph'S School (Douro) Well Supply	260014287	Douro-Dummer	Douro-Dummer	Peterborough V.N.C. Cdsb
R252 Warsaw Caves Campground Well Supply	260042042	Douro-Dummer	Douro-Dummer	Otonabee Region Conservation Authority
Warsaw Public School Well Supply	260011219	Douro-Dummer	Douro-Dummer	Kawartha Pine Ridge Dsb
Camp Kawartha Water Supply System	260028535	Lakefield	Douro-Dummer	Camp Kawartha Inc.
R252 Pine Vista Resort (Well 1) Well Supply	260070356	Lakefield	Douro-Dummer	Pine Vista Resort
R252 Pine Vista Resort (Well 2) Well Supply	260070382	Lakefield	Douro-Dummer	Pine Vista Resort
R252 Wildfire Golf Club New Club House Well Supply	260068367	Lakefield	Douro-Dummer	Wildfire Golf Club
R252 Irwin Inn Of Stony Lake Water Treatment Plant	260079898	Lakefield	Douro-Dummer	Irwin Inn Of Stony Lake Inc.
R252 Wantasa Cottage Resort Well Supply	260076388	LAKEFIELD, L29, C3 DOURO-DUMME	Douro-Dummer	Wantasa Resort
R252 Iron-Woods Golf And Country Club Well Supply	260082745	Warsaw	Douro-Dummer	Iron-Woods Golf And Country Club
R252 Scotsman Point Resort Well Supply	260083226	Lakefield	Galway-Cavendish-Harvey	Scotsman Point Resort Ltd.
R252 Buckhorn Community Centre Well Supply	260025545	Buckhorn	Galway-Cavendish-Harvey	Buckhorn Community Centre And Athletic Assoc

System Name	Drinking Water Information System No.	City	County District	Operating Authority
Small Municipal Non-Residential				
Buckhorn Daycare And Nursery School Well Supply	260021138	Buckhorn	Galway-Cavendish-Harvey	Buckhorn Daycare And Nursery School
R252 Sunrise Resort Water Treatment Plant	260082732	Buckhorn	Galway-Cavendish-Harvey	Sunrise Resort
Buckhorn Public School Well Supply	260010816	Buckhorn	Galway-Cavendish-Harvey	Kawartha Pine Ridge Dsb
R252 Marrick'S Landing Water Treatment Plant	260053625	Burleigh Falls	Galway-Cavendish-Harvey	Marrick'S Landing Cottages Inc.
Future World Child Care Centre Well Supply	260018187	Pontypool	Kawartha Lakes	Future World Nursery School And Daycare Cent
Grandview Public School Well Supply	260011349	Kawartha Lakes	Kawartha Lakes	Trillium Lakeland District School Board
Apsley And District Satellite Homes For Seniors	260016211	North Kawartha	North Kawartha	Apsley And District Satellite Homes For Seni
R252 Burleigh Island Lodge Water Treatment Plant	260042367	North Kawartha	North Kawartha	1324457 Ontario Limited
R252 Creekview Bed And Breakfast Well Supply	260052858	Apsley	North Kawartha	Creekview Bed And Breakfast
R252 Trinity United Church - Apsley Water Treatment Plant	260062270	Apsley	North Kawartha	Trinity United Church - Apsley
R252 St.George The Martyr Anglican Church Well Supply	260052962	Apsley	North Kawartha	St.George The Martyr Anglican Church
Apsley Central Public School Well Supply	260010790	North Kawartha	North Kawartha	Kawartha Pine Ridge Dsb
R252 Marvel Rapids Golf Course Well Supply	260050609	Apsley	North Kawartha	1297024 Ontario Limited
Keene United Church Well Supply	260025129	Otonabee-South Monaghan	Otonabee-South Monaghan	Keene United Church
R252 Elmhirst'S Resort Well Supply	260032448	Otonabee-South Monaghan	Otonabee-South Monaghan	Elmhirst Resort (Keene) Ltd.
Otonabee Non-Profit Housing Well Supply	260018265	Otonabee-South Monaghan	Otonabee-South Monaghan	Otonabee Non-Profit Housing Corporation
Keene House Well Supply	260021918	Keene	Otonabee-South Monaghan	Unknown Operator
North Shore Public School Well Supply	260011141	Otonabee-South Monaghan	Otonabee-South Monaghan	Kawartha Pine Ridge Dsb
R252 Carriage Inn Motel Well Supply	260054327	Peterborough	Otonabee-South Monaghan	Carriage Inn Motel
R252 Pine Crest Golf Club Well Supply	260060099	Peterborough	Otonabee-South Monaghan	Pine Crest Golf Course Ltd
R252 Robyn'S Motel Well Supply	260071188	Peterborough	Otonabee-South Monaghan	2098264 Ontario Inc.
R252 Blue Jay Motel Well Supply	260062192	Peterborough	Otonabee-South Monaghan	1033271 Ontario Inc.
Monaghan South Public School Well Supply	260011089	Otonabee-South Monaghan	Otonabee-South Monaghan	Kawartha Pine Ridge Dsb
Rhema Christian School Well Supply	260015145	Peterborough	Otonabee-South Monaghan	Peterborough Christian School Society
Cavan House Well Supply	260021905	Otonabee-South Monaghan	Peterborough	Unknown Operator
R252 Anglers' Retreat 713 Bolin Cottage Water Treatment Plant	260059631	Keene	Peterborough City	1191957 Ontario Inc. O/A Anglers' Retreat
R252 Anglers' Retreat 723 Bolin Cottage Well Supply	260059657	Keene	Peterborough City	1191957 Ontario Inc. O/A Anglers' Retreat
Christian Victory Church Well Supply	260070031	Peterborough	Peterborough City	Christian Victory Church
Hand In Hand Children'S Services Well Supply	260075959	Peterborough	Peterborough City	Hand In Hand Children'S Services
Springdale Country Manor Well Supply	260015990	Peterborough	Peterborough City	Omni Health Care Limited
R252 Nite Owl Motel Well Supply	260062699	Peterborough	Peterborough City	Vishav Consultant Inc.
R252 Esso Peterborough Bypass Service Centre Well Supply	260084110	Peterborough	Peterborough City	Imperial Oil
R252 Fowlers Fresh Fries Well Supply	260085813	Peterborough	Peterborough City	Fowlers Fresh Fries

System Name	Drinking Water Information System No.	City	County District	Operating Authority
Small Municipal Non-Residential				
R252 Petro-Canada Service Station (Peterborough)	260055718	Peterborough	Peterborough City	Petro-Canada
Pacl Well Supply	260018941	Peterborough	Peterborough City	Community Living Peterborough
R252 Goodlife Fitness (Peterborough) Well Supply	260061412	Peterborough	Peterborough City	Goodlife Fitness Clubs
R252 Beachwood Resort Main Lodge Well Supply	260054106	Lakefield	Peterborough City	386068 Ontario Ltd.
R252 Beachwood Resort Cottages Well Supply	260054158	Lakefield	Peterborough City	386068 Ontario Ltd.
R252 Ardagh Cottage Resort Water Treatment Plant	260056290	Burleigh Falls	Peterborough City	Ardagh Cottage Resort
R252 Catalina Bay Resort Well Supply	260085631	Buckhorn	Peterborough City	1715611 Ontario Inc (Catalina Bay Resort)
Wayside Academy Well Supply	260015119	Peterborough	Smith-Ennismore-Lakefield	Wayside Academy Inc.
R252 Knights Court Motel Well Supply	260066404	Peterborough	Smith-Ennismore-Lakefield	Knights Court Motel
R252 Tim Horton'S #1913 Well Supply	260063167	Bridgenorth	Smith-Ennismore-Lakefield	2035380 Ontario Inc.
R252 Chemong Regional Medical Centre Well Supply	260073619	Bridgenorth	Smith-Ennismore-Lakefield	Krimleen Investments
R252 Bridgenorth Dental Clinic Well Supply	260075062	Bridgenorth	Smith-Ennismore-Lakefield	Bridgenorth Dental Clinic
Twilight Kids Club Well Supply	260023114	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Twilight Kid'S Club
Chemong Senior Public School Well Supply	260010907	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Kawartha Pine Ridge Dsb
R252 Ennismore Optimist Club Cistern System	260025571	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Ennismore Optimist Club
Hope Valley Day Camp Well #2 Well Supply	260029029	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Kawartha Christian Ministries
Camp Moshava Well Supply	260031681	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Camp Moshava
Shamrock Child Care Program Well Supply	260023140	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Kawartha Child Care Services
St. Martin'S School (Ennismore) Well Supply	260014313	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Peterborough V.N.C. Cdsb
Youngs Point Public School Well Supply	260011245	Smith-Ennismore-Lakefield	Smith-Ennismore-Lakefield	Kawartha Pine Ridge Dsb
R252 Wildfire Golf Club (Turf Care Building) Well Supply	260051896	Lakefield	Smith-Ennismore-Lakefield	Wildfire Golf Club
R252 Reach Harbour Marina Water Treatment Plant	260057655	Lakefield	Smith-Ennismore-Lakefield	Reach Harbour
R252 Shady Point Resort Water Treatment Plant	260058344	Buckhorn	Smith-Ennismore-Lakefield	Shady Point Resort
R252 Forest Hill Lodge Well Supply	260054639	Burleigh Falls	Smith-Ennismore-Lakefield	Forest Hill Lodge
R252 Three Castles Resort Water Treatment Plant	260056927	Buckhorn	Smith-Ennismore-Lakefield	Three Castles Resort
Rosemere Manor Well Supply	260026962	Lakefield	Smith-Ennismore-Lakefield	Rosemere Manor Inc.
R252 Birch Bend Holiday Village Well Supply	260053131	Lakefield	Smith-Ennismore-Lakefield	Birch Bend Holiday Village
Old Chemong School Daycare Well Supply	260073242	Bridgenorth	Smith-Ennismore-Lakefield	1675432 Ontario Ltd.
Large Municipal Non-Residential				
R252 Warsaw Community Centre Well Supply	260029666	Douro-Dummer	Douro-Dummer	Douro-Dummer, The Township Of

Crowe Valley Source Protection Area

System Name	Drinking Water Information System No.	City	County District	Operating Authority
Small Municipal Non-Residential				
Wilberforce Elementary School	260011583	Highlands East	Highlands East	Trillium Lakeland District School Board
Coe hill public School	260013923	Wollaston	Wollaston	Hastings and Prince Edwards District School Board
Highland Grove Community Center	260027014	Highlands East	Highlands East	Highlands East, the corporation of the Municipality
Wilberforce Library	260028522	Highlands East	Highlands East	Highlands East, The Corporation of the Municipality
Wilberforce O.P.P	260029276	Highlands East	Highlands East	Highlands East, The Corporation of the Municipality
Gooderham Community Center	260029874	Highlands East	Highlands East	Highlands East, The Corporation of the Municipality
Old Township Office (Womans Institute)	260030082	Havelock-Belmont-Methuen	Havelock-Belmont-Methuen	Havelock-Belmont-Methuen, The Corporation of the Municipality
Cordova Mines Library/Recreation Hall	260030095	Havelock-Belmont-Methuen	Havelock-Belmont-Methuen	Havelock-Belmont-Methuen, The Corporation of the Municipality
Camp Can-Aqua	260040963	Highlands East	Highlands East	Camp Can-Aqua, A division of Camp Can-Ski IN.
Camp Artville	260041353	Tudor and Cashel	Tudor and Cashel	Artville Ltd.
The old School house Restaurant	260056082	Coe Hill	Limerick	The Old School house
Paudash Lake Motel and Restaurant	260056784	Bancroft	Faraday	2056529, Ontario Inc
Old Hastings Gallery	260058656	Ormsby	Limerick	The Old Hastings Gallery
Coe Hill Gospel Church	260060489	Coe Hill	Wollaston	Coe Hill Gospel Church
St. Michael's and All Angels Anglican Church	260061919	Coe Hill	Wollaston	St. Michael's and All Angels Anglican Church
Lakeview Cottages and Marina Water Treatment Plant	260070551	Apsley	North Kawartha	Lakeview Cottages and Marina
Beaver Creek Resort	260084994	Gilmour	Tudor and Chasel	Beaver Creek Resort Inc.
Craftsman Restaurant	260087750	Faraday	Faraday	Ontario Limited O/A Craftsman Restaurant
Non-Municipal Year-Round Residential				
Maple View (Monmouth Township)	260031109	Highlands East	Highlands East	Asl Group
Sama Adult Community	260034008	Havelock-Belmont-Methuen	Havelock-Belmont-Methuen	Sama Park Limited
Siddon Mobile Home Park	260084656	Bancroft	Faraday	Siddon Mobile Home Park Inc.
Non-Municipal Seasonal Residential				
Homestead Trailer Park	260031187	Highlands East	Highlands East	Homestead Trailer Park Ltd.
Homestead Trailer Park (Haliburton-DDW#2)	260031200	Highlands East	Highlands East	Homestead Trailer Park Ltd.
Glen Allan Park	260034528	Marmora and Lake	Marmora and Lake	1088141 Ontario Ltd.
Glen Allan Park (Nature T)	260034541	Marmora and Lake	Marmora and Lake	1088141 Ontario Ltd.
Cedarwoods Park Well	260076505	Marmora	Trent Hills	Cedarwoods Park
Island View Cottages	260083135	Coe Hill	Wollaston	Island View Cottages
Small Non-Municipal Non-Residential				
Tudor and Cashel Township Recreation Center	260054444	Gilmour	Tudor and Cashel	Tudor and Cashel Township, the Municipality
Limerick Community Center	260056212	Gilmour	Limerick	Township of Limerick
Limerick Township Office Building	260056225	Gilmour	Limerick	Township of Limerick
Township of Wollaston	260063453	Coe Hill	Wollaston	Wollaston, The Corporation of the Township
Booster Park Trailer Park	260071292	Marmora	Marmora and Lake	Marmora and Lake, the Municipality

Lower Trent Source Protection Area

System Name	Drinking Water Information System No.	City	County District	Operating Authority
Small Municipal Non-Residential				
Alnwick Civic Centre Well Supply	260037648	Alnwick/Haldimand	Alnwick/Haldimand	Alnwick/Haldimand, The Corporation of the Township
Vernonville Community Centre Well Supply	260037661	Alnwick/Haldimand	Alnwick/Haldimand	Alnwick/Haldimand, The Corporation of the Township
Centreton Community Centre Well Supply	260037674	Alnwick/Haldimand	Alnwick/Haldimand	Alnwick/Haldimand, The Corporation of the Township
Fenella Community Hall Well Supply	260037687	Alnwick/Haldimand	Alnwick/Haldimand	Alnwick/Haldimand, The Corporation of the Township
Roseneath Fairgrounds Well Supply	260037700	Alnwick/Haldimand	Alnwick/Haldimand	Alnwick/Haldimand, The Corporation of the Township
Hilton Hall Well Supply	260033800	Hilton	Brighton	Brighton, The Corporation of the Municipality
Castleton Public Library/Municipal Hall Well Supply	260034554	Cramahe	Cramahe	Lakefront Utility Services Inc.
Codrington Community Centre Well Supply	260033813	Codrington	Brighton	Brighton, The Corporation of the Municipality
Ivanhoe Hall Cistern System	260061282	Madoc	Centre Hastings	Centre Hastings, The Corporation of the Municipality
Moira Hall Well Supply	260033124	Centre Hastings	Centre Hastings	Centre Hastings, The Corporation of the Municipality
Non-Municipal Year-Round Residential				
Golden Beach Resort Well Supply	260053456	Roseneath	Alnwick/Haldimand	Golden Beach Resort
Non-Municipal Seasonal Residential				
R252 Alpine Resort Well Supply	260031499	Alnwick/Haldimand	Alnwick/Haldimand	1035576 Ontario Incorporated - Alpine Resort
R252 Shelter Valley Park And Golf Club Well Supply	260071162	Grafton	Alnwick/Haldimand	Shelter Valley Park And Golf Inc.
R252 Brighton Shores Summer Estates Well Supply	260071734	Brighton	Brighton	Brighton Shores Summer Estates Ltd.
R252 Iroquois Trail Campsite Well Supply	260036257	Quinte West	Quinte West	Iroquois Trail Campsite
R252 Sunset Cove Resort Well Supply	260052247	Roseneath	Alnwick/Haldimand	Sunset Cove Resort
R252 North Shore R.V.Park Water Treatment Plant	260038558	Carrying Place	Quinte West	North Shore R.V.Park Ltd.
R252 Ivanhoe District Camp Well Supply	260061568	Madoc	Madoc	Ivanhoe District Camp
R252 Cedardale Family Campground Water Treatment Plant	260069953	Carrying Place	Quinte West	Killam Properties Inc.
R252 Sandercock'S Tourist Resort Well Supply	260070629	Roseneath	Alnwick/Haldimand	1647921 Ontario Ltd O/A Sandercock'S Tourist
R252 Golden Beach Cottages Well Supply	260081809	Roseneath	Alnwick/Haldimand	Golden Beach Resort
R252 Pinnacle Park Well #3 Well Supply	260056667	Alnwick-Haldimand	Alnwick/Haldimand	Pinnacle Park Trailer & Camping Association
R252 Pinnacle Park Well #1 Well Supply	260056680	Alnwick-Haldimand	Alnwick/Haldimand	Pinnacle Park Trailer & Camping Association
R252 Pinnacle Park Well #4 Well Supply	260056693	Alnwick-Haldimand	Alnwick/Haldimand	Pinnacle Park Trailer & Camping Association
R252 Pinnacle Park Well#2 Well Supply	260056706	Alnwick-Haldimand	Alnwick/Haldimand	Pinnacle Park Trailer & Camping Association
R252 Lang'S Resort And Campground Well Supply	260065806	Roseneath	Alnwick/Haldimand	926641 Ontario Inc. O/A Lang'S Resort And Ca
R252 Oak Lake Hideaway Water Treatment Plant	260072254	Stirling	Quinte West	Oak Lake Hideaway Ltd.
R252 Cole'S Point Resort And Trailer Park Well Supply	260036114	Trent Hills	Trent Hills	Cole'S Point Resort And Trailer Park
R252 Woodland Estate Cottage Resort & Trailer Park Well Supply	260038324	Trent Hills	Trent Hills	1439110 Ontario Ltd.
R252 Friendly Acres Resort Well Supply	260038402	Trent Hills	Trent Hills	Friendly Acres Resort
Small Non-Municipal Non-Residential				
Plast Camp (Grafton) Well Supply	260079976	Grafton	Alnwick/Haldimand	Plast Ukrainian Youth Association Toronto
R252 Presqu'Ile Provincial Park - Stonehedge Well Supply	260050427	Brighton	Brighton	Ministry Of Natural Resources - Ontario Park
R252 Presqu'Ile Provincial Park - Cruise Cottage Well	260050440	Brighton	Brighton	Ministry Of Natural Resources - Ontario Park

System Name	Drinking Water Information System No.	City	County District	Operating Authority
Supply				
R252 Timberhouse Country Inn Well Supply	260075634	Brighton	Brighton	Timberhouse Country Inn
South Cramahe Public School Well Supply	260011193	Cramahe	Cramahe	Kawartha Pine Ridge Dsb
Ontario Early Years Northumberland Brighton Satellite Well Supply	260027794	Brighton	Brighton	Ontario Early Years Centre Northumberland Br
Goodrich-Loomis Conservation Centre Well Supply	260028756	Brighton	Brighton	Lower Trent Region Conservation Authority
Goodwin Learning Centre Well Supply	260020384	Quinte West	Quinte West	Goodwin Learning Centre
Susie'S Place Well Supply	260008580	Stirling	Stirling-Rawdon	Susie'S Place
R252 Mcquoid Chiropractic Clinic Well Supply	260073697	Brighton	Brighton	Mcquoid Chiropractic Clinic
Falconhurst Well Supply	260017992	Alnwick/Haldimand	Alnwick/Haldimand	Falconhurst
Croft On The Trent Well Supply	260029445	Quinte West	Quinte West	Croft On The Trent (Ann Bowen/ Balu Patel)
Smithfield Public School Well Supply	260011180	Brighton	Brighton	Kawartha Pine Ridge Dsb
Tdacl Lafferty Well Supply	260018330	Quinte West	Quinte West	Trenton And District Association For Communi
Castleton Public School Well Supply	260010855	Cramahe	Cramahe	Kawartha Pine Ridge Dsb
Tdacl Fraserglen Well Supply	260018538	Quinte West	Quinte West	Trenton And District Association For Communi
R252 Produce Processors Water Treatment Plant	260002967	Trenton	Quinte West	Produce Processors Limited
Murray Centennial Public School Well Supply	260011102	Quinte West	Quinte West	Kawartha Pine Ridge Dsb
Anthony Residence Well Supply	260024193	Roseneath	Alnwick/Haldimand	Howardine Anthony
St. Leonards Home Trenton Well Supply	260067223	Trenton	Quinte West	St. Leonards Home Trenton
Pathways To Independence Whites House Well Supply	260019461	Quinte West	Quinte West	Pathways To Independence
Quest Children'S Services Well Supply	260008141	Brighton	Brighton	Quest Children'S Services
R252 Christ Church, Glen Miller Well Supply	260067743	Quinte West	Quinte West	Christ Church, Glen Miller
R252 Curtis Point Cottages Water Treatment Plant	260051129	Roseneath	Alnwick/Haldimand	Curtis Point Cottages
Roseneath Centennial Public School Well Supply	260011167	Alnwick/Haldimand	Alnwick/Haldimand	Kawartha Pine Ridge Dsb
Golden Pond Retirement Residence Well Supply	260018512	Codrington	Brighton	Fairyland Retirement Village Ltd.
King Louis House Well Supply	260034775	Brighton	Brighton	Rudyard Kiplings Youth Services
R252 Pine Ridge Golf And Country Club Well Supply	260048581	Warkworth	Trent Hills	861197 Ontario Ltd
R252 Roseneath United Church Well Supply	260065962	Roseneath	Alnwick/Haldimand	Roseneath United Church
R252 Frankford Community Free Methodist Church Well Supply	260057018	Frankford	Quinte West	Frankford Community Free Methodist Church
Stockdale Public School Well Supply	260011206	Quinte West	Quinte West	Kawartha Pine Ridge Dsb
R252 Muskie Bay Resort Well Supply	260069693	Roseneath	Alnwick/Haldimand	Muskie Bay Resort
Robichaud Pine Ridge Location Well Supply	260044668	Warkworth	Trent Hills	Robichaud Youth Services Inc.
R252 Oak Hills Golf Course Well Supply	260059462	Stirling	Quinte West	Golf Management Corporation
R252 Island Park Well Supply	260060502	Stirling	Trent Hills	604840 Ontario Inc.
Pathways To Independence Ridge Road House Well Supply	260019448	Stirling-Rawdon	Stirling-Rawdon	Pathways To Independence
Ivanhoe Residence Well Supply	260008827	Centre Hastings	Centre Hastings	Ivanhoe Residence

APPENDIX C

WATER BUDGETS AND WATER QUANTITY STRESS ASSESSMENTS: TABULAR DATA

WATER BUDGETS AND WATER QUANTITY STRESS ASSESSMENTS: TABULAR DATA

- Tier 1 Long-term Monthly Water Budgets & Stress Calculations (Ungauged Subwatersheds)
- Tier 1 Long-term Monthly Stress Calculations (Intake-defined Subwatersheds)
- Summary of Permits to Take Water by Subwatershed (Surface Water)
- Summary of Permits to Take Water by Subwatershed (Groundwater)
- Summary of Water Takings by Subwatershed

TIER 1 LONG-TERM MONTHLY WATER BUDGETS & STRESS CALCULATIONS (UNGAUGED SUBWATERSHEDS)

GULL RIVER SUBWATERSHEDS

LONG-TERM AVERAGE ANNUAL WATER BUDGETS

GULL 1

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	905	6	0	45	853
Feb	674	12	0	31	630
Mar	747	97	0	35	615
Apr	743	396	0	65	282
May	929	726	0	55	148
Jun	901	1043	0	34	-176
Jul	823	1218	0	35	-430
Aug	861	983	0	35	-158
Sep	957	578	0	43	337
Oct	928	269	0	40	620
Nov	1079	70	0	39	970
Dec	943	13	0	51	879
Annual	10490	5411	0	508	

GULL 2

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	93	1	0	44	48
Feb	67	1	0	30	35
Mar	75	9	0	34	31
Apr	73	39	0	64	-29
May	93	78	0	54	-39
Jun	90	103	0	33	-46
Jul	83	120	0	34	-71
Aug	86	97	0	35	-45
Sep	94	61	0	42	-9
Oct	92	30	0	39	24
Nov	104	9	0	38	57
Dec	95	2	0	50	44
Annual	1045	549	0	497	

GULL 3

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	93	1	0	44	48
Feb	67	1	0	30	35
Mar	75	10	0	34	31
Apr	73	40	0	64	-31
May	93	73	0	54	-34
Jun	90	106	0	33	-49
Jul	83	123	0	34	-74
Aug	86	99	0	35	-47
Sep	94	57	0	42	-5
Oct	92	28	0	39	26
Nov	104	9	0	38	57
Dec	95	2	0	50	44
Annual	1045	548	0	497	

GULL 4

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	93	1	0	43	49
Feb	67	1	0	30	36
Mar	75	9	0	33	32
Apr	73	39	0	62	-28
May	93	80	0	53	-40
Jun	90	107	0	32	-49
Jul	83	123	0	33	-73
Aug	86	98	0	34	-46
Sep	94	62	0	41	-9
Oct	92	30	0	38	24
Nov	104	8	0	37	59
Dec	95	2	0	48	46
Annual	1045	562	0	484	

GULL 5

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	93	1	0	44	48
Feb	67	1	0	30	35
Mar	75	9	0	34	31
Apr	73	38	0	64	-29
May	93	77	0	54	-37
Jun	90	111	0	33	-54
Jul	83	118	0	34	-69
Aug	86	95	0	35	-43
Sep	94	61	0	42	-8
Oct	92	29	0	39	25
Nov	104	8	0	38	57
Dec	95	2	0	49	44
Annual	1045	549	0	496	

GULL 6

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	905	6	0	35	864
Feb	674	12	0	28	634
Mar	747	87	0	59	602
Apr	743	350	0	126	267
May	929	759	0	68	103
Jun	901	1113	0	27	-239
Jul	823	1319	0	16	-512
Aug	861	1013	0	11	-164
Sep	957	591	0	14	352
Oct	928	281	0	22	626
Nov	1079	69	0	38	972
Dec	943	13	0	44	886
Annual	10490	5612	0	488	

SURFACE WATER STRESS CALCULATIONS

GULL 1

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	41	25	17	3.00E-05	4.00E-05	0.0002	0.0002
Feb	30	17	13	3.00E-05	4.00E-05	0.0003	0.0003
Mar	30	16	14	3.00E-05	4.00E-05	0.0002	0.0003
Apr	57	28	29	3.00E-05	4.00E-05	0.0001	0.0001
May	45	25	20	3.00E-05	4.00E-05	0.0002	0.0002
Jun	32	23	9	3.00E-04	4.00E-04	0.004	0.004
Jul	35	25	11	3.00E-04	4.00E-04	0.003	0.004
Aug	35	26	9	3.00E-04	4.00E-04	0.003	0.004
Sep	41	27	14	3.00E-05	4.00E-05	0.0002	0.0003
Oct	34	23	12	3.00E-05	4.00E-05	0.0003	0.0003
Nov	37	15	22	3.00E-05	4.00E-05	0.0002	0.0002
Dec	46	21	25	3.00E-05	4.00E-05	0.0001	0.0002

GULL 2

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	40	24	16	4.00E-05	5.00E-05	0.0003	0.0003
Feb	29	16	13	4.00E-05	5.00E-05	0.0003	0.0004
Mar	30	16	14	4.00E-05	5.00E-05	0.0003	0.0004
Apr	55	27	28	4.00E-05	5.00E-05	0.0001	0.0002
May	44	25	19	3.00E-03	3.00E-03	0.01	0.02
Jun	32	23	9	6.00E-03	7.00E-03	0.1	0.1
Jul	34	24	10	6.00E-03	7.00E-03	0.1	0.1
Aug	34	25	9	6.00E-03	7.00E-03	0.1	0.1
Sep	40	26	14	5.00E-03	6.00E-03	0.04	0.04
Oct	34	22	11	4.00E-05	5.00E-05	0.0004	0.0004
Nov	37	15	22	4.00E-05	5.00E-05	0.0002	0.0002
Dec	45	21	24	4.00E-05	5.00E-05	0.0002	0.0002

GULL 3

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	41	24	16	6.00E-05	7.00E-05	0.0004	0.0004
Feb	29	16	13	6.00E-05	7.00E-05	0.0005	0.001
Mar	30	16	14	6.00E-05	7.00E-05	0.0004	0.001
Apr	55	27	28	6.00E-05	7.00E-05	0.0002	0.0003
May	44	25	19	6.00E-05	7.00E-05	0.0003	0.0004
Jun	32	23	9	5.00E-04	6.00E-04	0.006	0.007
Jul	34	24	10	5.00E-04	6.00E-04	0.005	0.006
Aug	34	25	9	5.00E-04	6.00E-04	0.005	0.007
Sep	40	26	14	6.00E-05	7.00E-05	0.0004	0.0005
Oct	34	22	11	6.00E-05	7.00E-05	0.0005	0.0006
Nov	37	15	22	6.00E-05	7.00E-05	0.0003	0.0003
Dec	45	21	24	6.00E-05	7.00E-05	0.0003	0.0003

GULL 4

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	39	24	16	6.00E-05	7.00E-05	0.0004	0.0004
Feb	28	16	12	6.00E-05	7.00E-05	0.0005	0.001
Mar	29	16	13	6.00E-05	7.00E-05	0.0004	0.001
Apr	54	27	27	6.00E-05	7.00E-05	0.0002	0.0002
May	43	24	19	6.00E-05	7.00E-05	0.0003	0.0004
Jun	31	22	9	9.00E-04	1.00E-03	0.01	0.01
Jul	34	23	10	9.00E-04	1.00E-03	0.01	0.01
Aug	33	24	9	9.00E-04	1.00E-03	0.01	0.01
Sep	39	26	14	6.00E-05	7.00E-05	0.0004	0.0005
Oct	33	22	11	6.00E-05	7.00E-05	0.001	0.001
Nov	36	14	21	6.00E-05	7.00E-05	0.0003	0.0003
Dec	43	20	23	6.00E-05	7.00E-05	0.0002	0.0003

GULL 5

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	40	24	16	0.2	0.3	1	2
Feb	29	16	13	0.2	0.3	2	2
Mar	30	16	14	0.2	0.3	2	2
Apr	55	27	28	0.2	0.3	1	1
May	44	25	19	0.2	0.3	1	1
Jun	32	23	9	0.2	0.3	3	3
Jul	34	24	10	0.3	0.4	3	4
Aug	34	25	9	0.3	0.4	4	4
Sep	40	26	14	0.2	0.3	2	2
Oct	34	22	11	0.2	0.3	2	2
Nov	37	15	22	0.2	0.3	1	1
Dec	45	21	24	0.2	0.3	1	1

GULL 6

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	30	15	15	0.004	0.005	0.03	0.03
Feb	22	12	11	0.004	0.005	0.04	0.04
Mar	52	25	27	0.004	0.005	0.01	0.02
Apr	125	73	52	0.004	0.005	0.01	0.01
May	61	30	31	0.004	0.005	0.01	0.02
Jun	22	13	9	0.013	0.016	0.1	0.2
Jul	13	7	6	0.013	0.016	0.2	0.3
Aug	10	6	4	0.013	0.016	0.4	0.5
Sep	10	5	5	0.004	0.005	0.09	0.1
Oct	16	7	10	0.004	0.005	0.04	0.05
Nov	33	11	22	0.004	0.005	0.02	0.02
Dec	36	19	17	0.004	0.005	0.02	0.03

GROUNDWATER STRESS CALCULATIONS

GULL 1

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	105,703	10,570	95,133	0.3	0.3	0.0003	0.0003
Feb	105,703	10,570	95,133	0.3	0.3	0.0003	0.0004
Mar	105,703	10,570	95,133	0.3	0.3	0.0003	0.0003
Apr	105,703	10,570	95,133	0.3	0.3	0.0003	0.0003
May	105,703	10,570	95,133	0.3	0.3	0.0003	0.0003
Jun	105,703	10,570	95,133	3	3	0.003	0.003
Jul	105,703	10,570	95,133	2	3	0.003	0.003
Aug	105,703	10,570	95,133	2	3	0.003	0.003
Sep	105,703	10,570	95,133	0.3	0.3	0.0003	0.0003
Oct	105,703	10,570	95,133	0.3	0.3	0.0003	0.0003
Nov	105,703	10,570	95,133	0.3	0.3	0.0003	0.0003
Dec	105,703	10,570	95,133	0.3	0.3	0.0003	0.0003
Annual	105,703	10,570	95,133	1	1	0.001	0.001

GULL 2

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	106,340	10,634	95,706	0.3	0.4	0.0003	0.0004
Feb	106,340	10,634	95,706	0.4	0.4	0.0004	0.0004
Mar	106,340	10,634	95,706	0.3	0.4	0.0003	0.0004
Apr	106,340	10,634	95,706	0.3	0.4	0.0003	0.0004
May	106,340	10,634	95,706	0.3	0.4	0.0003	0.0004
Jun	106,340	10,634	95,706	3	3	0.003	0.003
Jul	106,340	10,634	95,706	3	3	0.003	0.003
Aug	106,340	10,634	95,706	3	3	0.003	0.003
Sep	106,340	10,634	95,706	0.3	0.4	0.0003	0.0004
Oct	106,340	10,634	95,706	0.3	0.4	0.0003	0.0004
Nov	106,340	10,634	95,706	0.3	0.4	0.0003	0.0004
Dec	106,340	10,634	95,706	0.3	0.4	0.0003	0.0004
Annual	106,340	10,634	95,706	1	1	0.001	0.001

GULL 3

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	20,122	2,012	18,110	0	0	0	0
Feb	20,122	2,012	18,110	0	0	0	0
Mar	20,122	2,012	18,110	0	0	0	0
Apr	20,122	2,012	18,110	0	0	0	0
May	20,122	2,012	18,110	0	0	0	0
Jun	20,122	2,012	18,110	1	1	0	0
Jul	20,122	2,012	18,110	1	1	0	0
Aug	20,122	2,012	18,110	1	1	0	0
Sep	20,122	2,012	18,110	0	0	0	0
Oct	20,122	2,012	18,110	0	0	0	0
Nov	20,122	2,012	18,110	0	0	0	0
Dec	20,122	2,012	18,110	0	0	0	0
Annual	20,122	2,012	18,110	0	0	0	0

GULL 4

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	46,267	4,627	41,640	1	1	0	0
Feb	46,267	4,627	41,640	1	1	0	0
Mar	46,267	4,627	41,640	1	1	0	0
Apr	46,267	4,627	41,640	1	1	0	0
May	46,267	4,627	41,640	1	1	0	0
Jun	46,267	4,627	41,640	9	11	0	0
Jul	46,267	4,627	41,640	9	10	0	0
Aug	46,267	4,627	41,640	9	10	0	0
Sep	46,267	4,627	41,640	1	1	0	0
Oct	46,267	4,627	41,640	1	1	0	0
Nov	46,267	4,627	41,640	1	1	0	0
Dec	46,267	4,627	41,640	1	1	0	0
Annual	46,267	4,627	41,640	3	3	0	0

GULL 5

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	204,337	20,434	183,903	1,015	1,218	1	1
Feb	204,337	20,434	183,903	1,106	1,327	1	1
Mar	204,337	20,434	183,903	1,028	1,234	1	1
Apr	204,337	20,434	183,903	1,054	1,265	1	1
May	204,337	20,434	183,903	1,066	1,279	1	1
Jun	204,337	20,434	183,903	1,138	1,365	1	1
Jul	204,337	20,434	183,903	1,163	1,396	1	1
Aug	204,337	20,434	183,903	1,140	1,368	1	1
Sep	204,337	20,434	183,903	1,022	1,227	1	1
Oct	204,337	20,434	183,903	984	1,180	1	1
Nov	204,337	20,434	183,903	976	1,172	1	1
Dec	204,337	20,434	183,903	954	1,145	1	1
Annual	204,337	20,434	183,903	1,054	1,265	1	1

GULL 6

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	30,853	3,085	27,767	9	11	0	0
Feb	30,853	3,085	27,767	11	13	0	0
Mar	30,853	3,085	27,767	9	11	0	0
Apr	30,853	3,085	27,767	10	12	0	0
May	30,853	3,085	27,767	9	11	0	0
Jun	30,853	3,085	27,767	33	39	0	0
Jul	30,853	3,085	27,767	32	38	0	0
Aug	30,853	3,085	27,767	32	38	0	0
Sep	30,853	3,085	27,767	10	12	0	0
Oct	30,853	3,085	27,767	9	11	0	0
Nov	30,853	3,085	27,767	10	12	0	0
Dec	30,853	3,085	27,767	9	11	0	0
Annual	30,853	3,085	27,767	15	18	0	0

BURNT RIVER SUBWATERSHEDS

LONG-TERM AVERAGE ANNUAL WATER BUDGETS

Burnt 1

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	85	0	0	33	52
Feb	59	1	0	18	41
Mar	67	13	0	61	-8
Apr	72	55	0	112	-95
May	85	66	0	48	-30
Jun	84	107	0	17	-40
Jul	74	124	0	17	-66
Aug	87	95	0	15	-23
Sep	91	49	0	15	27
Oct	82	24	0	16	43
Nov	95	8	0	33	54
Dec	85	1	0	40	43
Annual	967	544	0	424	-2

Burnt 2

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	91	1	0	37	52
Feb	67	2	0	24	42
Mar	75	13	0	62	0
Apr	74	61	0	119	-107
May	93	73	0	53	-33
Jun	90	104	0	18	-33
Jul	82	134	0	17	-69
Aug	86	103	0	16	-33
Sep	96	60	0	14	21
Oct	93	30	0	15	47
Nov	108	9	0	36	63
Dec	94	2	0	43	49
Annual	1049	590	0	455	-1

Burnt 3

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	83	0	0	28	54
Feb	59	1	0	16	42
Mar	57	12	0	59	-14
Apr	73	53	0	107	-87
May	85	68	0	44	-27
Jun	80	99	0	15	-34
Jul	64	115	0	15	-67
Aug	86	87	0	14	-15
Sep	88	51	0	15	23
Oct	76	23	0	15	38
Nov	86	7	0	30	49
Dec	78	1	0	39	37
Annual	915	519	0	397	-2

Burnt 4

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	89	1	0	37	51
Feb	68	2	0	26	39
Mar	65	13	0	56	-4
Apr	76	60	0	120	-104
May	96	77	0	53	-34
Jun	91	111	0	18	-39
Jul	87	130	0	18	-61
Aug	91	100	0	17	-25
Sep	93	57	0	15	21
Oct	92	28	0	16	47
Nov	102	9	0	37	56
Dec	96	2	0	43	51
Annual	1045	589	0	457	-1

Burnt 5

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	91	1	0	39	51
Feb	67	2	0	25	41
Mar	75	14	0	62	-1
Apr	74	60	0	121	-107
May	93	76	0	54	-36
Jun	90	109	0	19	-37
Jul	82	127	0	18	-62
Aug	86	99	0	16	-30
Sep	96	57	0	15	24
Oct	93	28	0	16	49
Nov	108	9	0	37	62
Dec	94	2	0	45	47
Annual	1049	583	0	467	-1

Burnt 6

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	89	1	0	37	51
Feb	68	2	0	27	39
Mar	65	13	0	57	-5
Apr	76	61	0	121	-106
May	96	70	0	53	-28
Jun	91	113	0	19	-41
Jul	87	132	0	18	-63
Aug	91	101	0	17	-27
Sep	93	53	0	16	25
Oct	92	26	0	17	49
Nov	102	9	0	38	56
Dec	96	2	0	44	50
Annual	1045	582	0	463	-1

SURFACE WATER STRESS CALCULATIONS

Burnt 1

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	29	14	14	0.01	0.01	0.1	0.1
Feb	15	7	7	0.01	0.01	0.1	0.1
Mar	56	27	29	0.01	0.01	0.02	0.02
Apr	115	67	48	0.01	0.01	0.01	0.01
May	45	22	23	0.01	0.01	0.03	0.03
Jun	14	8	6	0.01	0.01	0.2	0.2
Jul	14	8	6	0.01	0.02	0.2	0.3
Aug	14	9	5	0.1	0.1	2	2
Sep	10	5	5	0.01	0.01	0.1	0.1
Oct	13	5	7	0.01	0.01	0.1	0.1
Nov	29	10	19	0.01	0.01	0.03	0.04
Dec	34	18	16	0.01	0.01	0.04	0.04

Burnt 2

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	33	16	17	0.0002	0.0003	0.001	0.002
Feb	20	10	10	0.0002	0.0003	0.002	0.003
Mar	57	27	30	0.0002	0.0003	0.001	0.001
Apr	123	72	51	0.0002	0.0003	0	0.001
May	49	24	25	0.0002	0.0003	0.001	0.001
Jun	15	8	6	1	1.2	16	19
Jul	14	8	6	1	1.2	16	19
Aug	14	9	5	1	1.2	19	23
Sep	10	5	5	0.0002	0.0003	0.004	0.005
Oct	12	5	7	0.0002	0.0003	0.003	0.004
Nov	32	11	21	0.0002	0.0003	0.001	0.001
Dec	37	20	17	0.0002	0.0003	0.001	0.002

Burnt 3

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	25	12	13	0.003	0.004	0.03	0.03
Feb	13	7	6	0.003	0.004	0.1	0.1
Mar	54	26	28	0.003	0.004	0.01	0.01
Apr	110	65	46	0.003	0.004	0.01	0.01
May	41	20	21	0.003	0.004	0.02	0.02
Jun	13	7	5	0.01	0.01	0.2	0.2
Jul	13	7	6	0.01	0.01	0.2	0.2
Aug	13	8	5	0.01	0.01	0.2	0.3
Sep	10	5	5	0.003	0.004	0.1	0.1
Oct	12	5	7	0.003	0.004	0.05	0.1
Nov	27	9	18	0.003	0.004	0.02	0.02
Dec	33	18	16	0.003	0.004	0.02	0.02

Burnt 4

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	32	16	16	0.1	0.1	1	1
Feb	22	11	11	0.1	0.1	1	1
Mar	51	25	27	0.1	0.1	0.4	1
Apr	124	72	51	0.1	0.1	0.2	0.3
May	49	24	25	0.1	0.1	0.5	1
Jun	15	9	7	0.1	0.1	2	2
Jul	15	9	7	0.1	0.1	2	2
Aug	15	10	6	0.1	0.1	2	3
Sep	11	6	5	0.1	0.1	2	3
Oct	13	5	8	0.1	0.1	2	2
Nov	33	11	22	0.1	0.1	1	1
Dec	37	20	17	0.1	0.1	1	1

Burnt 5

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	34	17	17	0.003	0.003	0.02	0.02
Feb	20	10	10	0.003	0.003	0.03	0.03
Mar	57	27	30	0.003	0.003	0.01	0.01
Apr	124	73	51	0.003	0.003	0.01	0.01
May	50	25	25	0.003	0.003	0.01	0.01
Jun	16	9	7	0.01	0.01	0.1	0.2
Jul	15	8	7	0.01	0.01	0.1	0.2
Aug	15	9	5	0.01	0.01	0.2	0.2
Sep	11	6	5	0.003	0.003	0.1	0.1
Oct	13	5	7	0.003	0.003	0.04	0.04
Nov	33	11	22	0.003	0.003	0.01	0.01
Dec	39	21	18	0.003	0.003	0.02	0.02

Burnt 6

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	33	16	17	0.003	0.003	0.02	0.02
Feb	22	11	11	0.003	0.003	0.03	0.03
Mar	52	25	27	0.003	0.003	0.01	0.01
Apr	124	73	52	0.003	0.003	0.01	0.01
May	49	24	25	0.003	0.003	0.01	0.01
Jun	16	9	7	0.01	0.01	0.1	0.2
Jul	15	9	7	0.01	0.01	0.1	0.2
Aug	15	10	6	0.01	0.01	0.2	0.2
Sep	11	6	5	0.003	0.003	0.1	0.1
Oct	13	5	8	0.003	0.003	0.04	0.04
Nov	33	11	22	0.003	0.003	0.01	0.01
Dec	38	20	18	0.003	0.003	0.02	0.02

GROUNDWATER STRESS CALCULATIONS

Burnt 1

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	47,689	4,769	42,921	11	14	0.03	0.03
Feb	47,689	4,769	42,921	13	15	0.03	0.04
Mar	47,689	4,769	42,921	11	14	0.03	0.03
Apr	47,689	4,769	42,921	12	14	0.03	0.03
May	47,689	4,769	42,921	11	14	0.03	0.03
Jun	47,689	4,769	42,921	39	47	0.1	0.1
Jul	47,689	4,769	42,921	38	45	0.1	0.1
Aug	47,689	4,769	42,921	38	45	0.1	0.1
Sep	47,689	4,769	42,921	12	14	0.03	0.03
Oct	47,689	4,769	42,921	11	14	0.03	0.03
Nov	47,689	4,769	42,921	12	14	0.03	0.03
Dec	47,689	4,769	42,921	11	14	0.03	0.03
Annual	47,689	4,769	42,921	18	22	0.04	0.1

Burnt 2

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	127,568	12,757	114,811	436	523	0.4	0.5
Feb	127,568	12,757	114,811	482	579	0.4	1
Mar	127,568	12,757	114,811	436	523	0.4	0.5
Apr	127,568	12,757	114,811	450	540	0.4	0.5
May	127,568	12,757	114,811	436	523	0.4	0.5
Jun	127,568	12,757	114,811	2652	3182	2	3
Jul	127,568	12,757	114,811	2566	3080	2	3
Aug	127,568	12,757	114,811	2566	3080	2	3
Sep	127,568	12,757	114,811	450	540	0.4	0.5
Oct	127,568	12,757	114,811	436	523	0.4	0.5
Nov	127,568	12,757	114,811	450	540	0.4	0.5
Dec	127,568	12,757	114,811	436	523	0.4	0.5
Annual	127,568	12,757	114,811	983	1180	1	1

Burnt 3

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	80,389	8,039	72,350	23	28	0.03	0.04
Feb	80,389	8,039	72,350	26	31	0.04	0.04
Mar	80,389	8,039	72,350	23	28	0.03	0.04
Apr	80,389	8,039	72,350	24	29	0.03	0.04
May	80,389	8,039	72,350	23	28	0.03	0.04
Jun	80,389	8,039	72,350	72	87	0.1	0.1
Jul	80,389	8,039	72,350	70	84	0.1	0.1
Aug	80,389	8,039	72,350	70	84	0.1	0.1
Sep	80,389	8,039	72,350	24	29	0.03	0.04
Oct	80,389	8,039	72,350	23	28	0.03	0.04
Nov	80,389	8,039	72,350	24	29	0.03	0.04
Dec	80,389	8,039	72,350	23	28	0.03	0.04
Annual	80,389	8,039	72,350	36	43	0.05	0.1

Burnt 4

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	230,474	23,047	207,427	84	101	0.04	0.05
Feb	230,474	23,047	207,427	93	112	0.04	0.1
Mar	230,474	23,047	207,427	84	101	0.04	0.05
Apr	230,474	23,047	207,427	87	104	0.04	0.1
May	230,474	23,047	207,427	84	101	0.04	0.05
Jun	230,474	23,047	207,427	102	122	0.05	0.1
Jul	230,474	23,047	207,427	98	118	0.05	0.1
Aug	230,474	23,047	207,427	98	118	0.05	0.1
Sep	230,474	23,047	207,427	87	104	0.04	0.1
Oct	230,474	23,047	207,427	84	101	0.04	0.05
Nov	230,474	23,047	207,427	87	104	0.04	0.1
Dec	230,474	23,047	207,427	84	101	0.04	0.05
Annual	230,474	23,047	207,427	89	107	0.04	0.1

Burnt 5

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	9,288	929	8,359	2	2	0.02	0.03
Feb	9,288	929	8,359	2	3	0.03	0.03
Mar	9,288	929	8,359	2	2	0.02	0.03
Apr	9,288	929	8,359	2	2	0.02	0.03
May	9,288	929	8,359	2	2	0.02	0.03
Jun	9,288	929	8,359	7	8	0.1	0.1
Jul	9,288	929	8,359	7	8	0.1	0.1
Aug	9,288	929	8,359	7	8	0.1	0.1
Sep	9,288	929	8,359	2	2	0.02	0.03
Oct	9,288	929	8,359	2	2	0.02	0.03
Nov	9,288	929	8,359	2	2	0.02	0.03
Dec	9,288	929	8,359	2	2	0.02	0.03
Annual	9,288	929	8,359	3	4	0.04	0.05

Burnt 6

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	81,965	8,196	73,768	17	21	0.02	0.03
Feb	81,965	8,196	73,768	19	23	0.03	0.03
Mar	81,965	8,196	73,768	17	21	0.02	0.03
Apr	81,965	8,196	73,768	18	22	0.02	0.03
May	81,965	8,196	73,768	17	21	0.02	0.03
Jun	81,965	8,196	73,768	60	72	0.1	0.1
Jul	81,965	8,196	73,768	58	70	0.1	0.1
Aug	81,965	8,196	73,768	58	70	0.1	0.1
Sep	81,965	8,196	73,768	18	22	0.02	0.03
Oct	81,965	8,196	73,768	17	21	0.02	0.03
Nov	81,965	8,196	73,768	18	22	0.02	0.03
Dec	81,965	8,196	73,768	17	21	0.02	0.03
Annual	81,965	8,196	73,768	28	34	0.04	0.05

CROWE RIVER SUBWATERSHEDS

LONG-TERM AVERAGE ANNUAL WATER BUDGETS

Crowe 1

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	70	1	0	29	39
Feb	52	1	0	21	30
Mar	65	10	0	71	-17
Apr	61	40	0	100	-79
May	86	73	0	35	-22
Jun	79	107	0	16	-44
Jul	68	112	0	7	-51
Aug	88	82	0	6	-1
Sep	88	55	0	6	27
Oct	77	27	0	12	38
Nov	80	10	0	25	45
Dec	74	2	0	35	37
Annual	888	520	0	364	2

Crowe 2

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	69	1	0	26	43
Feb	53	1	0	19	33
Mar	69	9	0	55	5
Apr	71	40	0	123	-92
May	84	78	0	54	-49
Jun	90	114	0	22	-46
Jul	67	118	0	9	-61
Aug	82	83	0	8	-8
Sep	101	55	0	8	38
Oct	81	28	0	15	38
Nov	91	10	0	25	57
Dec	77	2	0	34	42
Annual	937	538	0	398	1

Crowe 3

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	78	1	0	28	49
Feb	59	1	0	22	36
Mar	61	9	0	53	-1
Apr	74	39	0	132	-97
May	94	82	0	61	-49
Jun	92	121	0	25	-54
Jul	83	127	0	10	-53
Aug	88	90	0	9	-10
Sep	97	58	0	8	32
Oct	88	30	0	16	43
Nov	93	9	0	27	57
Dec	87	1	0	37	48
Annual	995	566	0	428	1

Crowe 4

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	70	1	0	30	38
Feb	52	1	0	21	29
Mar	65	10	0	76	-23
Apr	61	39	0	97	-77
May	86	69	0	33	-17
Jun	79	103	0	15	-39
Jul	68	110	0	6	-50
Aug	88	82	0	5	-1
Sep	88	53	0	5	28
Oct	77	26	0	12	38
Nov	80	9	0	28	42
Dec	74	2	0	36	35
Annual	888	505	0	364	2

Crowe 5

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	70	1	0	33	36
Feb	50	2	0	30	18
Mar	66	10	0	78	-22
Apr	76	39	0	98	-61
May	75	75	0	34	-35
Jun	81	109	0	14	-43
Jul	56	107	0	6	-58
Aug	84	75	0	6	2
Sep	95	47	0	6	41
Oct	76	24	0	12	40
Nov	88	10	0	29	48
Dec	73	2	0	38	33
Annual	889	502	0	384	1

SURFACE WATER STRESS CALCULATIONS

Crowe 1

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	26	12	15	0.1	0.1	1	1
Feb	17	6	11	0.1	0.1	1	1
Mar	63	31	32	0.1	0.1	0.3	0.3
Apr	96	57	39	0.1	0.1	0.2	0.3
May	32	18	14	0.1	0.1	1	1
Jun	15	8	6	0.1	0.1	1	2
Jul	6	3	3	0.1	0.1	3	3
Aug	5	2	3	0.1	0.2	5	5
Sep	3	1	2	0.1	0.1	5	6
Oct	9	4	5	0.1	0.1	2	2
Nov	19	9	9	0.1	0.1	1	1
Dec	33	12	21	0.1	0.1	0.4	0.5

Crowe 2

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	23	11	12	0.001	0.001	0.004	0.01
Feb	16	8	8	0.001	0.001	0.01	0.01
Mar	51	24	26	0.001	0.001	0.002	0.002
Apr	127	74	52	0.001	0.001	0.001	0.001
May	50	25	25	0.001	0.001	0.002	0.002
Jun	18	10	8	0.001	0.001	0.01	0.01
Jul	8	5	4	0.001	0.001	0.02	0.03
Aug	7	5	3	0.001	0.001	0.03	0.03
Sep	5	3	3	0.001	0.001	0.02	0.02
Oct	12	5	7	0.001	0.001	0.01	0.01
Nov	22	7	15	0.001	0.001	0.004	0.004
Dec	29	15	13	0.001	0.001	0.004	0.005

Crowe 3

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	25	12	13	0.1	0.1	0	1
Feb	19	10	9	0.1	0.1	1	1
Mar	49	23	25	0.1	0.1	0.2	0.3
Apr	135	79	56	0.1	0.1	0.1	0.1
May	57	28	29	0.1	0.1	0.2	0.2
Jun	21	12	9	0.1	0.1	1	1
Jul	8	5	4	0.1	0.1	2	2
Aug	8	5	3	0.1	0.1	2	3
Sep	5	3	3	0.1	0.1	2	3
Oct	12	5	7	0.1	0.1	1	1
Nov	24	8	16	0.1	0.1	0.4	0.4
Dec	31	17	15	0.1	0.1	0.4	0.5

Crowe 4

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	27	12	15	0.002	0.002	0.01	0.01
Feb	17	6	11	0.002	0.002	0.02	0.02
Mar	67	34	34	0.002	0.002	0.01	0.01
Apr	94	56	38	0.002	0.002	0.005	0.01
May	30	17	13	0.002	0.002	0.01	0.02
Jun	13	8	6	0.01	0.01	0.1	0.1
Jul	5	2	3	0.01	0.01	0.2	0.3
Aug	4	1	3	0.1	0.1	3	3
Sep	2	1	1	0.002	0.002	0.1	0.2
Oct	9	4	5	0.002	0.002	0.04	0.04
Nov	21	10	10	0.002	0.002	0.02	0.02
Dec	35	13	22	0.002	0.002	0.01	0.01

Crowe 5

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	29	13	16	0	0	0.01	0.01
Feb	25	9	15	0	0	0.01	0.01
Mar	69	34	35	0	0	0.01	0.01
Apr	94	56	38	0	0	0	0.01
May	31	17	14	0	0	0.01	0.02
Jun	13	7	5	0	0	0.1	0.2
Jul	6	2	3	0.3	0.3	9	10
Aug	5	2	3	0.3	0.3	9	11
Sep	3	2	2	0	0	0.1	0.1
Oct	9	5	5	0	0	0.04	0.04
Nov	21	11	11	0	0	0.02	0.02
Dec	36	13	22	0	0	0.01	0.01

GROUNDWATER STRESS CALCULATIONS

Crowe 1

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	112,648	11,265	101,383	1,550	1,860	2	2
Feb	112,648	11,265	101,383	1,716	2,060	2	2
Mar	112,648	11,265	101,383	1,550	1,860	2	2
Apr	112,648	11,265	101,383	1,602	1,922	2	2
May	112,648	11,265	101,383	2,465	2,958	2	3
Jun	112,648	11,265	101,383	2,664	3,197	3	3
Jul	112,648	11,265	101,383	2,578	3,094	3	3
Aug	112,648	11,265	101,383	2,578	3,094	3	3
Sep	112,648	11,265	101,383	2,547	3,056	3	3
Oct	112,648	11,265	101,383	2,465	2,958	2	3
Nov	112,648	11,265	101,383	1,602	1,922	2	2
Dec	112,648	11,265	101,383	1,550	1,860	2	2
Annual	112,648	11,265	101,383	2,072	2,487	2	2

Crowe 2

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	204,593	20,459	184,134	10	11	0.01	0.01
Feb	204,593	20,459	184,134	11	13	0.01	0.01
Mar	204,593	20,459	184,134	10	11	0.01	0.01
Apr	204,593	20,459	184,134	10	12	0.01	0.01
May	204,593	20,459	184,134	10	11	0.01	0.01
Jun	204,593	20,459	184,134	15	18	0.01	0.01
Jul	204,593	20,459	184,134	14	17	0.01	0.01
Aug	204,593	20,459	184,134	14	17	0.01	0.01
Sep	204,593	20,459	184,134	10	12	0.01	0.01
Oct	204,593	20,459	184,134	10	11	0.01	0.01
Nov	204,593	20,459	184,134	10	12	0.01	0.01
Dec	204,593	20,459	184,134	10	11	0.01	0.01
Annual	204,593	20,459	184,134	11	13	0.01	0.01

Crowe 3

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	333,302	33,330	299,972	114	136	0.04	0.05
Feb	333,302	33,330	299,972	126	151	0.04	0.1
Mar	333,302	33,330	299,972	125	151	0.04	0.1
Apr	333,302	33,330	299,972	131	157	0.04	0.1
May	333,302	33,330	299,972	135	162	0.04	0.1
Jun	333,302	33,330	299,972	265	318	0.1	0.1
Jul	333,302	33,330	299,972	253	304	0.1	0.1
Aug	333,302	33,330	299,972	246	295	0.1	0.1
Sep	333,302	33,330	299,972	134	161	0.04	0.1
Oct	333,302	33,330	299,972	134	161	0.04	0.1
Nov	333,302	33,330	299,972	110	132	0.04	0.04
Dec	333,302	33,330	299,972	108	129	0.04	0.04
Annual	333,302	33,330	299,972	157	188	0.1	0.1

Crowe 4

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	43,643	4,364	39,279	1,571	1,886	4	5
Feb	43,643	4,364	39,279	1,748	2,098	4	5
Mar	43,643	4,364	39,279	1,616	1,939	4	5
Apr	43,643	4,364	39,279	1,615	1,938	4	5
May	43,643	4,364	39,279	1,614	1,937	4	5
Jun	43,643	4,364	39,279	1,840	2,208	5	6
Jul	43,643	4,364	39,279	1,754	2,104	4	5
Aug	43,643	4,364	39,279	1,780	2,136	5	5
Sep	43,643	4,364	39,279	1,756	2,107	4	5
Oct	43,643	4,364	39,279	1,559	1,871	4	5
Nov	43,643	4,364	39,279	1,606	1,927	4	5
Dec	43,643	4,364	39,279	1,511	1,813	4	5
Annual	43,643	4,364	39,279	1,664	1,997	4	5

Crowe 5

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	15,188	1,519	13,669	3	3	0.02	0.02
Feb	15,188	1,519	13,669	3	3	0.02	0.02
Mar	15,188	1,519	13,669	3	3	0.02	0.02
Apr	15,188	1,519	13,669	3	3	0.02	0.02
May	15,188	1,519	13,669	3	3	0.02	0.02
Jun	15,188	1,519	13,669	10	12	0.1	0.1
Jul	15,188	1,519	13,669	10	12	0.1	0.1
Aug	15,188	1,519	13,669	10	12	0.1	0.1
Sep	15,188	1,519	13,669	3	3	0.02	0.02
Oct	15,188	1,519	13,669	3	3	0.02	0.02
Nov	15,188	1,519	13,669	3	3	0.02	0.02
Dec	15,188	1,519	13,669	3	3	0.02	0.02
Annual	15,188	1,519	13,669	4	5	0.03	0.04

KAWARTHA LAKES WEST SUBWATERSHEDS

LONG-TERM AVERAGE ANNUAL WATER BUDGETS

KLW-N1

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	86	1	0	20	66
Feb	65	1	0	20	43
Mar	55	10	0	64	-19
Apr	79	40	0	107	-68
May	96	88	0	48	-40
Jun	87	127	0	18	-57
Jul	77	143	0	15	-81
Aug	89	100	0	12	-24
Sep	92	61	0	18	12
Oct	86	32	0	18	36
Nov	93	9	0	20	64
Dec	91	2	0	22	67
Annual	995	613	0	382	0

KLW-N2

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	88	0	0	19	69
Feb	58	1	0	18	39
Mar	64	10	0	82	-28
Apr	73	42	0	105	-74
May	87	84	0	41	-38
Jun	86	131	0	17	-62
Jul	66	135	0	7	-76
Aug	92	95	0	6	-10
Sep	90	61	0	11	19
Oct	77	30	0	12	34
Nov	92	7	0	16	68
Dec	78	1	0	17	60
Annual	953	599	0	351	1

KLW-N3

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	83	0	0	14	68
Feb	59	1	0	14	44
Mar	57	10	0	79	-32
Apr	73	41	0	109	-77
May	85	78	0	38	-31
Jun	80	120	0	16	-56
Jul	64	133	0	7	-76
Aug	86	94	0	6	-14
Sep	88	58	0	11	19
Oct	76	27	0	13	36
Nov	86	8	0	17	62
Dec	78	1	0	18	58
Annual	915	571	0	344	0

KLW-N4

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	82	1	0	29	52
Feb	56	1	0	33	21
Mar	64	10	3	98	-48
Apr	71	40	0	79	-49
May	90	70	0	32	-12
Jun	88	114	0	13	-39
Jul	71	135	0	5	-70
Aug	91	103	0	5	-17
Sep	92	62	0	9	21
Oct	78	26	0	12	39
Nov	93	8	0	29	55
Dec	76	2	0	27	47
Annual	953	572	3	370	1

KLW-N5

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	77	0	0	18	59
Feb	56	1	0	21	34
Mar	57	10	0	80	-34
Apr	71	41	0	96	-66
May	89	70	0	40	-22
Jun	82	116	0	18	-52
Jul	68	135	0	7	-74
Aug	85	97	0	7	-18
Sep	90	56	0	11	23
Oct	77	25	0	12	40
Nov	88	8	0	19	61
Dec	76	2	0	23	51
Annual	915	561	0	353	1

KLW-N6

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	75	0	0	16	58
Feb	57	1	0	20	36
Mar	59	10	0	75	-26
Apr	72	40	0	89	-57
May	88	80	0	38	-30
Jun	81	123	0	16	-58
Jul	67	140	0	7	-80
Aug	85	94	0	6	-16
Sep	89	60	0	10	18
Oct	77	29	0	12	35
Nov	86	8	0	16	62
Dec	76	2	0	16	58
Annual	912	588	0	321	1

KLW-S1

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	73	1	0	25	47
Feb	53	1	0	29	23
Mar	64	9	5	63	-14
Apr	73	41	10	61	-39
May	82	71	0	32	-22
Jun	83	111	0	13	-42
Jul	76	135	0	12	-71
Aug	86	107	0	10	-32
Sep	92	62	0	15	14
Oct	76	27	0	16	32
Nov	91	8	0	23	59
Dec	74	2	0	25	47
Annual	922	576	15	326	2

KLW-S2

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	73	1	0	29	43
Feb	53	1	0	30	21
Mar	64	10	9	55	-10
Apr	73	39	26	50	-43
May	82	74	10	26	-28
Jun	83	103	0	14	-35
Jul	76	124	2	11	-61
Aug	86	102	2	9	-27
Sep	92	65	3	13	11
Oct	76	28	3	14	30
Nov	91	8	3	22	57
Dec	74	2	3	25	44
Annual	922	557	61	300	2

KLW-S3

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	ΔS
Jan	70	1	-2	32	38
Feb	51	1	-2	30	20
Mar	62	10	0	57	-5
Apr	69	41	0	73	-46
May	84	72	0	37	-25
Jun	83	101	0	15	-34
Jul	74	123	0	13	-62
Aug	89	100	0	11	-22
Sep	92	64	0	16	11
Oct	76	27	-1	19	30
Nov	90	7	-2	29	55
Dec	72	2	-3	33	39
Annual	913	550	-10	365	0

SURFACE WATER STRESS CALCULATIONS

KLW-N1

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	17	8	9	0.002	0.002	0.02	0.03
Feb	17	9	8	0.002	0.002	0.02	0.03
Mar	59	28	31	0.002	0.002	0.01	0.01
Apr	110	64	45	0.002	0.002	0	0.01
May	45	22	23	0.01	0.01	0.03	0.04
Jun	15	8	6	0.01	0.01	0.1	0.2
Jul	13	7	6	0.01	0.01	0.1	0.2
Aug	11	7	4	0.01	0.01	0.2	0.2
Sep	13	7	6	0.01	0.01	0.1	0.1
Oct	14	6	8	0.01	0.01	0.1	0.1
Nov	17	6	12	0.002	0.002	0.02	0.02
Dec	19	10	9	0.002	0.002	0.02	0.03

KLW-N2

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	17	8	9	0.03	0.04	0.3	0.4
Feb	15	6	9	0.03	0.03	0.3	0.4
Mar	73	36	36	0.03	0.04	0.1	0.1
Apr	101	60	41	0.04	0.05	0.1	0.1
May	38	21	17	0.04	0.04	0.2	0.3
Jun	15	9	7	0.1	0.1	1	1
Jul	6	3	3	0.1	0.1	2	2
Aug	5	2	3	0.1	0.1	2	2
Sep	5	3	3	0.03	0.04	1	2
Oct	10	5	5	0.04	0.05	1	1
Nov	12	6	6	0.03	0.04	1	1
Dec	16	6	10	0.03	0.03	0.3	0.4

KLW-N3

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	13	6	7	0.1	0.1	1	1
Feb	12	4	7	0.1	0.1	1	1
Mar	70	35	35	0.1	0.1	0.2	0.2
Apr	105	62	43	0.1	0.1	0.2	0.2
May	35	19	16	0.1	0.1	1	1
Jun	15	8	6	0.1	0.2	2	3
Jul	6	3	3	0.2	0.2	5	6
Aug	5	2	3	0.2	0.2	5	6
Sep	6	3	3	0.1	0.1	4	5
Oct	10	5	5	0.1	0.1	2	2
Nov	12	6	6	0.1	0.1	1	1
Dec	17	6	11	0.1	0.1	1	1

KLW-N4

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	26	12	14	0.1	0.1	1	1
Feb	27	10	17	0.1	0.1	1	1
Mar	87	44	44	0.1	0.1	0.2	0.3
Apr	76	45	31	0.1	0.1	0.3	0.4
May	29	16	13	0.2	0.2	2	2
Jun	12	7	5	0.2	0.3	5	6
Jul	5	2	3	0.2	0.3	9	11
Aug	4	1	2	0.2	0.3	9	11
Sep	4	2	2	0.2	0.2	9	11
Oct	9	4	5	0.1	0.1	3	3
Nov	22	11	11	0.1	0.1	1	1
Dec	26	10	16	0.1	0.1	1	1

KLW-N5

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	16	7	9	0.01	0.01	0.1	0.1
Feb	17	6	11	0.01	0.01	0.1	0.1
Mar	71	36	36	0.01	0.01	0.03	0.03
Apr	93	55	38	0.01	0.01	0.03	0.03
May	37	21	17	0.01	0.01	0.1	0.1
Jun	16	9	7	0.03	0.04	0.4	1
Jul	6	3	4	0.03	0.04	1	1
Aug	5	2	3	0.1	0.1	2	2
Sep	5	3	3	0.01	0.01	0.4	0.4
Oct	9	5	5	0.01	0.01	0.2	0.2
Nov	14	7	7	0.01	0.01	0.1	0.2
Dec	22	8	14	0.01	0.01	0.1	0.1

KLW-N6

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	15	7	8	0.01	0.01	0.1	0.1
Feb	16	6	10	0.01	0.01	0.1	0.1
Mar	67	33	34	0.01	0.01	0.03	0.03
Apr	86	51	35	0.1	0.1	0.2	0.2
May	35	19	15	0.2	0.3	2	2
Jun	14	8	6	0.3	0.3	5	6
Jul	6	3	3	0.3	0.4	10	12
Aug	4	2	3	0.3	0.4	12	15
Sep	5	3	3	0.2	0.3	9	11
Oct	9	4	5	0.1	0.1	1	2
Nov	12	6	6	0.02	0.02	0.3	0.3
Dec	15	6	9	0.01	0.01	0.1	0.1

SURFACE WATER STRESS CALCULATIONS (CONT.'D)

KLW-S1

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	20	12	8	0	0	0	0
Feb	24	12	12	0	0	0	0
Mar	60	38	22	0	0	0	0
Apr	59	39	21	0	0	0	0
May	31	20	12	0.2	0.2	1	2
Jun	12	7	6	0.2	0.2	4	4
Jul	11	6	4	0.2	0.2	5	6
Aug	9	6	3	0.2	0.2	6	7
Sep	12	8	4	0.2	0.2	4	5
Oct	14	9	5	0	0	0	0
Nov	21	14	7	0	0	0	0
Dec	22	14	8	0	0	0	0

KLW-S2

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	23	13	10	0	0	0	0
Feb	25	13	13	0	0	0	0
Mar	52	33	19	0	0	0	0
Apr	49	32	17	0	0	0	0
May	25	16	9	0.1	0.2	1	2
Jun	13	7	6	0.1	0.2	2	3
Jul	10	6	4	0.1	0.2	3	4
Aug	8	5	3	0.1	0.2	5	5
Sep	10	7	3	0.1	0.2	4	5
Oct	13	8	4	0	0	0	0
Nov	20	13	7	0	0	0	0
Dec	22	14	8	0	0	0	0

KLW-S3

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	25	15	11	0	0	0	0
Feb	26	13	13	0	0	0	0
Mar	54	34	20	0	0	0	0
Apr	71	46	25	0	0	0	0
May	36	22	13	0	0	0	0
Jun	13	7	6	0.1	0.1	1	1
Jul	12	7	5	0.1	0.1	1	2
Aug	10	7	4	0.1	0.1	2	2
Sep	13	8	4	0	0	0	0
Oct	17	11	6	0	0	0	0
Nov	26	17	9	0	0	0	0
Dec	29	18	11	0.1	0.1	1	1

GROUNDWATER STRESS CALCULATIONS

KLW-N1

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	211,576	21,158	190,418	1,431	1,717	1	1
Feb	211,576	21,158	190,418	1,545	1,854	1	1
Mar	211,576	21,158	190,418	1,406	1,687	1	1
Apr	211,576	21,158	190,418	1,458	1,750	1	1
May	211,576	21,158	190,418	1,438	1,725	1	1
Jun	211,576	21,158	190,418	1,503	1,804	1	1
Jul	211,576	21,158	190,418	1,484	1,780	1	1
Aug	211,576	21,158	190,418	1,512	1,814	1	1
Sep	211,576	21,158	190,418	1,481	1,777	1	1
Oct	211,576	21,158	190,418	1,457	1,748	1	1
Nov	211,576	21,158	190,418	1,529	1,835	1	1
Dec	211,576	21,158	190,418	1,519	1,823	1	1
Annual	211,576	21,158	190,418	1,480	1,776	1	1

KLW-N2

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	177,952	17,795	160,156	169	202	0.1	0.1
Feb	177,952	17,795	160,156	187	224	0.1	0.1
Mar	177,952	17,795	160,156	169	202	0.1	0.1
Apr	177,952	17,795	160,156	408	490	0.3	0.3
May	177,952	17,795	160,156	395	474	0.2	0.3
Jun	177,952	17,795	160,156	729	875	0.5	1
Jul	177,952	17,795	160,156	706	847	0.4	1
Aug	177,952	17,795	160,156	706	847	0.4	1
Sep	177,952	17,795	160,156	408	490	0.3	0.3
Oct	177,952	17,795	160,156	395	474	0.2	0.3
Nov	177,952	17,795	160,156	174	209	0.1	0.1
Dec	177,952	17,795	160,156	169	202	0.1	0.1
Annual	177,952	17,795	160,156	385	461	0.2	0.3

KLW-N3

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	65,569	6,557	59,012	47	56	0.1	0.1
Feb	65,569	6,557	59,012	52	62	0.1	0.1
Mar	65,569	6,557	59,012	47	56	0.1	0.1
Apr	65,569	6,557	59,012	48	58	0.1	0.1
May	65,569	6,557	59,012	47	56	0.1	0.1
Jun	65,569	6,557	59,012	146	175	0.2	0.3
Jul	65,569	6,557	59,012	141	170	0.2	0.3
Aug	65,569	6,557	59,012	141	170	0.2	0.3
Sep	65,569	6,557	59,012	48	58	0.1	0.1
Oct	65,569	6,557	59,012	47	56	0.1	0.1
Nov	65,569	6,557	59,012	48	58	0.1	0.1
Dec	65,569	6,557	59,012	47	56	0.1	0.1
Annual	65,569	6,557	59,012	71	86	0.1	0.1

KLW-N4

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	71,071	7,107	63,964	297	357	0.5	1
Feb	71,071	7,107	63,964	328	393	1	1
Mar	71,071	7,107	63,964	297	356	0.5	1
Apr	71,071	7,107	63,964	2,688	3,225	4	5
May	71,071	7,107	63,964	2,605	3,126	4	5
Jun	71,071	7,107	63,964	3,007	3,608	5	6
Jul	71,071	7,107	63,964	2,908	3,490	5	5
Aug	71,071	7,107	63,964	2,904	3,485	5	5
Sep	71,071	7,107	63,964	2,689	3,227	4	5
Oct	71,071	7,107	63,964	2,601	3,121	4	5
Nov	71,071	7,107	63,964	306	367	0.5	1
Dec	71,071	7,107	63,964	297	356	0.5	1
Annual	71,071	7,107	63,964	1,744	2,093	3	3

KLW-N5

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	35,536	3,554	31,982	169	202	1	1
Feb	35,536	3,554	31,982	187	224	1	1
Mar	35,536	3,554	31,982	169	202	1	1
Apr	35,536	3,554	31,982	408	490	1	2
May	35,536	3,554	31,982	395	474	1	1
Jun	35,536	3,554	31,982	729	875	2	3
Jul	35,536	3,554	31,982	706	847	2	3
Aug	35,536	3,554	31,982	706	847	2	3
Sep	35,536	3,554	31,982	408	490	1	2
Oct	35,536	3,554	31,982	395	474	1	1
Nov	35,536	3,554	31,982	174	209	1	1
Dec	35,536	3,554	31,982	169	202	1	1
Annual	35,536	3,554	31,982	385	461	1	1

KLW-N6

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	45,776	4,578	41,198	445	534	1	1
Feb	45,776	4,578	41,198	475	570	1	1
Mar	45,776	4,578	41,198	434	521	1	1
Apr	45,776	4,578	41,198	459	550	1	1
May	45,776	4,578	41,198	438	526	1	1
Jun	45,776	4,578	41,198	547	656	1	2
Jul	45,776	4,578	41,198	533	640	1	2
Aug	45,776	4,578	41,198	530	636	1	2
Sep	45,776	4,578	41,198	450	540	1	1
Oct	45,776	4,578	41,198	439	526	1	1
Nov	45,776	4,578	41,198	452	542	1	1
Dec	45,776	4,578	41,198	441	529	1	1
Annual	45,776	4,578	41,198	470	564	1	1

GROUNDWATER STRESS CALCULATIONS (CONT.'D)

KLW-S1

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	196,893	19,689	177,204	5,510	6,612	3	4
Feb	196,893	19,689	177,204	6,093	7,313	3	4
Mar	196,893	19,689	177,204	5,533	6,641	3	4
Apr	196,893	19,689	177,204	6,388	7,666	4	4
May	196,893	19,689	177,204	6,801	8,162	4	5
Jun	196,893	19,689	177,204	11,663	13,996	7	8
Jul	196,893	19,689	177,204	11,295	13,554	6	8
Aug	196,893	19,689	177,204	11,281	13,537	6	8
Sep	196,893	19,689	177,204	7,024	8,429	4	5
Oct	196,893	19,689	177,204	6,790	8,149	4	5
Nov	196,893	19,689	177,204	6,402	7,683	4	4
Dec	196,893	19,689	177,204	5,537	6,645	3	4
Annual	196,893	19,689	177,204	7,526	9,032	4	5

KLW-S2

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	61,932	6,193	55,739	197	237	0.4	0.4
Feb	61,932	6,193	55,739	217	260	0.4	0.5
Mar	61,932	6,193	55,739	197	237	0.4	0.4
Apr	61,932	6,193	55,739	632	759	1	1
May	61,932	6,193	55,739	615	738	1	1
Jun	61,932	6,193	55,739	1,492	1,790	3	3
Jul	61,932	6,193	55,739	1,442	1,730	3	3
Aug	61,932	6,193	55,739	1,523	1,827	3	3
Sep	61,932	6,193	55,739	632	758	1	1
Oct	61,932	6,193	55,739	611	733	1	1
Nov	61,932	6,193	55,739	201	241	0.4	0.4
Dec	61,932	6,193	55,739	196	235	0.4	0.4
Annual	61,932	6,193	55,739	663	795	1	1

KLW-S3

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	143,584	14,358	129,226	239	287	0.2	0.2
Feb	143,584	14,358	129,226	268	321	0.2	0.2
Mar	143,584	14,358	129,226	749	899	1	1
Apr	143,584	14,358	129,226	5,309	6,371	4	5
May	143,584	14,358	129,226	6,427	7,712	5	6
Jun	143,584	14,358	129,226	7,088	8,506	5	7
Jul	143,584	14,358	129,226	6,857	8,229	5	6
Aug	143,584	14,358	129,226	6,844	8,213	5	6
Sep	143,584	14,358	129,226	6,660	7,992	5	6
Oct	143,584	14,358	129,226	5,167	6,200	4	5
Nov	143,584	14,358	129,226	5,319	6,383	4	5
Dec	143,584	14,358	129,226	5,299	6,358	4	5
Annual	143,584	14,358	129,226	4,685	5,623	4	4

KAWARTHA LAKES EAST SUBWATERSHEDS

LONG-TERM AVERAGE ANNUAL WATER BUDGETS

KLE-1

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	75	0	0	22	53
Feb	56	1	0	17	38
Mar	58	10	0	67	-19
Apr	70	41	0	95	-66
May	80	74	0	41	-36
Jun	80	117	0	16	-53
Jul	67	119	0	14	-66
Aug	93	89	0	11	-7
Sep	93	54	0	17	22
Oct	77	27	0	18	32
Nov	89	10	0	24	55
Dec	76	2	0	29	46
Annual	914	543	0	369	1

KLE-2

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	84	0	0	25	59
Feb	62	1	0	23	38
Mar	56	11	0	68	-23
Apr	76	40	0	109	-73
May	85	81	0	47	-43
Jun	87	116	0	17	-46
Jul	78	127	0	15	-64
Aug	92	91	0	12	-11
Sep	88	57	0	18	13
Oct	82	30	0	20	33
Nov	93	7	0	26	59
Dec	91	1	0	31	59
Annual	974	561	0	412	1

KLE-3

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	65	1	0	26	39
Feb	52	1	0	22	29
Mar	61	10	1	81	-31
Apr	67	41	0	86	-60
May	85	65	0	36	-16
Jun	79	101	0	18	-40
Jul	71	120	0	8	-57
Aug	93	89	0	8	-4
Sep	93	54	0	13	26
Oct	77	25	0	17	35
Nov	86	9	0	32	45
Dec	70	2	0	33	36
Annual	899	517	1	378	1

KLE-4

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	84	0	0	32	61
Feb	62	1	0	24	38
Mar	56	10	0	38	-23
Apr	76	42	0	77	-74
May	85	83	0	49	-44
Jun	87	121	0	25	-51
Jul	78	128	0	20	-65
Aug	92	91	0	18	-10
Sep	88	58	0	22	13
Oct	82	31	0	24	34
Nov	93	8	0	31	60
Dec	91	1	0	38	62
Annual	974	576	0	399	-1

KLE-5

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	75	0	0	16	58
Feb	56	1	0	13	42
Mar	58	10	0	77	-29
Apr	70	40	0	102	-74
May	80	84	0	36	-42
Jun	80	125	0	14	-60
Jul	67	125	0	5	-64
Aug	93	91	0	5	-4
Sep	93	60	0	9	23
Oct	77	31	0	10	35
Nov	89	9	0	17	64
Dec	76	1	0	22	53
Annual	914	577	0	328	1

SURFACE WATER STRESS CALCULATIONS

KLE-1

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	19	9	10	0.1	0.1	1	1
Feb	14	7	7	0.1	0.1	1	1
Mar	61	29	32	0.1	0.1	0.2	0.3
Apr	97	57	40	0.1	0.1	0.2	0.2
May	38	19	19	0.1	0.1	0.4	0.4
Jun	13	7	6	0.1	0.1	1	2
Jul	12	7	5	0.1	0.1	2	2
Aug	10	7	4	0.1	0.2	3	4
Sep	12	6	6	0.1	0.1	1	1
Oct	14	6	8	0.1	0.1	1	1
Nov	22	7	14	0.1	0.1	0.5	1
Dec	24	13	11	0.1	0.1	1	1

KLE-2

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	22	11	11	0.0002	0.0002	0.002	0.002
Feb	19	10	9	0.0002	0.0002	0.002	0.002
Mar	62	30	33	0.0002	0.0002	0.001	0.001
Apr	112	66	46	0.0002	0.0002	0.0004	0.0005
May	44	22	22	0.0002	0.0002	0.001	0.001
Jun	15	8	6	0.0004	0.0004	0.01	0.01
Jul	13	7	6	0.0004	0.0004	0.01	0.01
Aug	11	7	4	0.0004	0.0004	0.01	0.01
Sep	13	7	6	0.0002	0.0002	0.003	0.004
Oct	16	7	9	0.0002	0.0002	0.002	0.002
Nov	23	8	16	0.0002	0.0002	0.001	0.001
Dec	26	14	12	0.0002	0.0002	0.002	0.002

KLE-3

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	23	10	13	0.01	0.01	0.1	0.1
Feb	18	7	11	0.01	0.01	0.1	0.1
Mar	72	36	36	0.01	0.01	0.03	0.03
Apr	82	49	33	0.01	0.01	0.03	0.03
May	33	18	15	0.01	0.01	0.1	0.1
Jun	16	9	7	0.03	0.03	0.4	0.5
Jul	7	3	4	0.03	0.03	1	1
Aug	6	2	4	0.03	0.03	1	1
Sep	7	3	3	0.01	0.01	0.3	0.3
Oct	13	6	7	0.01	0.01	0.1	0.2
Nov	24	12	12	0.01	0.01	0.1	0.1
Dec	31	12	19	0.01	0.01	0	0.1

KLE-4

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	35	20	16	0.004	0.005	0.03	0.03
Feb	26	14	12	0.004	0.005	0.03	0.04
Mar	41	21	21	0.004	0.005	0.02	0.02
Apr	91	51	40	0.004	0.005	0.01	0.01
May	53	28	25	0.004	0.005	0.02	0.02
Jun	27	18	9	0.01	0.01	0.1	0.1
Jul	24	16	8	0.02	0.03	0.3	0.3
Aug	22	16	6	0.02	0.03	0.4	0.4
Sep	26	16	10	0.004	0.005	0.04	0.1
Oct	25	15	11	0.004	0.005	0.04	0.05
Nov	35	13	22	0.004	0.005	0.02	0.02
Dec	41	20	21	0.004	0.005	0.02	0.02

KLE-5

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	15	7	8	0.01	0.01	0.1	0.1
Feb	11	4	7	0.01	0.01	0.1	0.1
Mar	69	34	34	0.01	0.01	0.02	0.02
Apr	98	58	40	0.1	0.1	0.3	0.3
May	33	19	15	0.1	0.1	1	1
Jun	13	7	5	0.1	0.1	2	2
Jul	5	2	3	0.1	0.1	4	5
Aug	4	1	2	0.1	0.1	4	5
Sep	5	2	2	0.1	0.1	4	5
Oct	8	4	4	0.1	0.1	2	3
Nov	13	6	6	0.1	0.1	2	2
Dec	21	8	13	0.01	0.01	0.05	0.1

GROUNDWATER STRESS CALCULATIONS

KLE-1

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	60115	6011	54103	12	15	0.02	0.03
Feb	60115	6011	54103	14	17	0.03	0.03
Mar	60115	6011	54103	12	15	0.02	0.03
Apr	60115	6011	54103	13	15	0.02	0.03
May	60115	6011	54103	12	15	0.02	0.03
Jun	60115	6011	54103	61	73	0.1	0.1
Jul	60115	6011	54103	59	70	0.1	0.1
Aug	60115	6011	54103	59	70	0.1	0.1
Sep	60115	6011	54103	13	15	0.02	0.03
Oct	60115	6011	54103	12	15	0.02	0.03
Nov	60115	6011	54103	13	15	0.02	0.03
Dec	60115	6011	54103	12	15	0.02	0.03
Annual	60115	6011	54103	24	29	0.05	0.1

KLE-2

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	122403	12240	110163	2	2	0.002	0.002
Feb	122403	12240	110163	2	3	0.002	0.002
Mar	122403	12240	110163	2	2	0.002	0.002
Apr	122403	12240	110163	2	3	0.002	0.002
May	122403	12240	110163	2	2	0.002	0.002
Jun	122403	12240	110163	4	5	0.004	0.004
Jul	122403	12240	110163	4	5	0.004	0.004
Aug	122403	12240	110163	4	5	0.004	0.004
Sep	122403	12240	110163	2	3	0.002	0.002
Oct	122403	12240	110163	2	2	0.002	0.002
Nov	122403	12240	110163	2	3	0.002	0.002
Dec	122403	12240	110163	2	2	0.002	0.002
Annual	122403	12240	110163	3	3	0.002	0.003

KLE-3

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	37963	3796	34166	70	84	0.2	0.2
Feb	37963	3796	34166	77	93	0.2	0.3
Mar	37963	3796	34166	70	84	0.2	0.2
Apr	37963	3796	34166	72	86	0.2	0.3
May	37963	3796	34166	134	161	0.4	0.5
Jun	37963	3796	34166	273	328	1	1
Jul	37963	3796	34166	264	317	1	1
Aug	37963	3796	34166	264	317	1	1
Sep	37963	3796	34166	139	167	0.4	0.5
Oct	37963	3796	34166	134	161	0.4	0.5
Nov	37963	3796	34166	72	86	0.2	0.3
Dec	37963	3796	34166	70	84	0.2	0.2
Annual	37963	3796	34166	137	164	0.4	0.5

KLE-4

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	232135	23213	208921	59	70	0.03	0.03
Feb	232135	23213	208921	65	78	0.03	0.04
Mar	232135	23213	208921	1190	1427	1	1
Apr	232135	23213	208921	1229	1475	1	1
May	232135	23213	208921	1190	1427	1	1
Jun	232135	23213	208921	1263	1516	1	1
Jul	232135	23213	208921	1222	1467	1	1
Aug	232135	23213	208921	1222	1467	1	1
Sep	232135	23213	208921	1229	1475	1	1
Oct	232135	23213	208921	1190	1427	1	1
Nov	232135	23213	208921	1229	1475	1	1
Dec	232135	23213	208921	1190	1427	1	1
Annual	232135	23213	208921	1023	1228	0.5	1

KLE-5

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	9649	965	8684	6	8	0.1	0.1
Feb	9649	965	8684	7	9	0.1	0.1
Mar	9649	965	8684	6	8	0.1	0.1
Apr	9649	965	8684	7	8	0.1	0.1
May	9649	965	8684	953	1144	11	13
Jun	9649	965	8684	989	1187	11	14
Jul	9649	965	8684	957	1149	11	13
Aug	9649	965	8684	957	1149	11	13
Sep	9649	965	8684	985	1182	11	14
Oct	9649	965	8684	953	1144	11	13
Nov	9649	965	8684	7	8	0.1	0.1
Dec	9649	965	8684	6	8	0.1	0.1
Annual	9649	965	8684	486	584	6	7

RICE L AKE

LONG-TERM AVERAGE ANNUAL WATER BUDGETS

Ouse 1

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	66	1	0	26	40
Feb	51	1	0	24	26
Mar	58	10	0	72	-24
Apr	66	40	0	77	-51
May	79	77	0	32	-29
Jun	78	119	0	14	-56
Jul	71	131	-0.5	7	-66
Aug	90	95	-0.5	6	-11
Sep	100	64	-0.5	10	26
Oct	79	29	0	11	38
Nov	93	8	0	22	63
Dec	75	2	0	29	45
Annual	907	576	-1.5	329	1

Ouse 2

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	70	1	-2	24	47
Feb	52	1	-2	20	33
Mar	65	10	0	72	-17
Apr	61	39	0	88	-66
May	86	74	0	37	-25
Jun	79	114	0	17	-52
Jul	68	126	-1	8	-66
Aug	88	90	-1	8	-9
Sep	88	60	-1	12	17
Oct	77	28	-1	12	38
Nov	80	8	-1	19	54
Dec	74	1	-1	26	48
Annual	888	551	-10	344	2

Ouse 3

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	71	1	-2	26	45
Feb	48	1	-2	26	21
Mar	66	10	4	72	-21
Apr	68	40	0	70	-44
May	78	71	0	30	-24
Jun	76	109	0	12	-47
Jul	59	125	0	4	-72
Aug	81	89	0	4	-13
Sep	82	56	0	8	17
Oct	74	25	0	9	38
Nov	77	7	0	15	53
Dec	71	2	0	19	50
Annual	853	537	0	295	2

Rice 1

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	78	1	0	28	48
Feb	49	2	0	32	14
Mar	62	10	0	71	-20
Apr	70	41	0	70	-41
May	80	76	0	31	-27
Jun	83	108	0	14	-41
Jul	69	123	0	6	-61
Aug	81	93	0	6	-18
Sep	85	58	0	10	16
Oct	72	26	0	11	34
Nov	86	8	0	22	55
Dec	74	2	0	28	43
Annual	889	547	0	328	2

SURFACE WATER STRESS CALCULATIONS

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	23	10	13	0.1	0.1	1	1
Feb	19	7	12	0.1	0.1	1	1
Mar	64	32	32	0.1	0.1	0.3	0.4
Apr	74	44	30	0.1	0.1	0.3	0.4
May	29	16	13	0.1	0.1	1	1
Jun	13	7	6	0.1	0.2	3	3
Jul	6	3	3	0.1	0.2	5	5
Aug	5	2	3	0.1	0.2	5	6
Sep	5	3	3	0.1	0.1	4	5
Oct	9	4	4	0.1	0.1	2	3
Nov	16	8	8	0.1	0.1	1	2
Dec	27	10	17	0.1	0.1	1	1

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	22	10	12	0	0	0.3	0.4
Feb	16	6	10	0	0	0.4	0.4
Mar	64	32	32	0	0	0.1	0.1
Apr	85	50	34	0.1	0.2	0.4	0.5
May	34	19	15	0.1	0.2	1	1
Jun	16	9	7	0.2	0.2	2	3
Jul	7	3	4	0.2	0.2	4	5
Aug	6	2	4	0.2	0.2	4	5
Sep	6	3	3	0.1	0.2	4	5
Oct	10	5	5	0.1	0.2	3	3
Nov	14	7	7	0	0	1	1
Dec	24	9	15	0	0	0.2	0.3

Ouse 3

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	24	11	13	0.01	0.02	0.1	0.1
Feb	21	8	13	0.01	0.02	0.1	0.1
Mar	64	32	32	0.01	0.02	0.05	0.1
Apr	67	40	27	0.1	0.1	0.4	1
May	27	15	12	0.1	0.1	1	1
Jun	11	6	5	0.2	0.2	4	4
Jul	4	2	2	0.2	0.2	8	10
Aug	3	1	2	0.2	0.2	9	10
Sep	4	2	2	0.1	0.1	6	7
Oct	7	3	4	0.1	0.1	3	4
Nov	11	6	6	0.01	0.02	0.3	0.3
Dec	18	7	11	0.01	0.02	0.1	0.2

Rice 1

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	25	11	14	0	0	0	0
Feb	26	10	17	0	0	0	0
Mar	63	32	32	0	0	0	0
Apr	67	40	27	0.1	0.1	0.4	0.4
May	28	16	13	0.1	0.2	1	1
Jun	13	7	5	0.2	0.2	3	3
Jul	5	2	3	0.2	0.2	5	6
Aug	4	1	3	0.2	0.2	7	8
Sep	5	2	3	0.1	0.2	5	6
Oct	8	4	4	0.1	0.1	2	3
Nov	16	8	8	0.004	0.005	0.1	0.1
Dec	26	10	16	0	0	0	0

GROUNDWATER STRESS CALCULATIONS

Ouse 1

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	102,277	10,228	92,049	171	205	0	0
Feb	102,277	10,228	92,049	189	226	0	0
Mar	102,277	10,228	92,049	171	205	0	0
Apr	102,277	10,228	92,049	224	268	0	0
May	102,277	10,228	92,049	295	354	0	0
Jun	102,277	10,228	92,049	797	956	1	1
Jul	102,277	10,228	92,049	773	927	1	1
Aug	102,277	10,228	92,049	771	926	1	1
Sep	102,277	10,228	92,049	305	366	0	0
Oct	102,277	10,228	92,049	296	355	0	0
Nov	102,277	10,228	92,049	224	269	0	0
Dec	102,277	10,228	92,049	173	207	0	0
Annual	102,277	10,228	92,049	366	439	0	1

Ouse 2

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	75,924	7,592	68,332	1,534	1,841	2.00	3.00
Feb	75,924	7,592	68,332	1,851	2,222	3.00	3.00
Mar	75,924	7,592	68,332	1,739	2,086	3.00	3.00
Apr	75,924	7,592	68,332	1,230	1,476	2.00	2.00
May	75,924	7,592	68,332	1,178	1,413	2.00	2.00
Jun	75,924	7,592	68,332	1,530	1,836	2.00	3.00
Jul	75,924	7,592	68,332	1,447	1,737	2.00	3.00
Aug	75,924	7,592	68,332	1,492	1,791	2.00	3.00
Sep	75,924	7,592	68,332	1,270	1,524	2.00	2.00
Oct	75,924	7,592	68,332	1,180	1,416	2.00	2.00
Nov	75,924	7,592	68,332	1,112	1,335	2.00	2.00
Dec	75,924	7,592	68,332	1,135	1,362	2.00	2.00
Annual	75,924	7,592	68,332	1,392	1,670	2.00	2.00

Ouse 3

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	20,010	2,001	18,009	58	70	0	0
Feb	20,010	2,001	18,009	65	78	0	0
Mar	20,010	2,001	18,009	58	70	0	0
Apr	20,010	2,001	18,009	60	73	0	0
May	20,010	2,001	18,009	58	70	0	0
Jun	20,010	2,001	18,009	262	314	1	2
Jul	20,010	2,001	18,009	254	304	1	2
Aug	20,010	2,001	18,009	254	304	1	2
Sep	20,010	2,001	18,009	60	73	0	0
Oct	20,010	2,001	18,009	58	70	0	0
Nov	20,010	2,001	18,009	60	73	0	0
Dec	20,010	2,001	18,009	58	70	0	0
Annual	20,010	2,001	18,009	109	131	1	1

Rice 1

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	271,706	27,171	244,535	2,798	3,358	1.00	1.00
Feb	271,706	27,171	244,535	3,075	3,690	1.00	2.00
Mar	271,706	27,171	244,535	2,862	3,434	1.00	1.00
Apr	271,706	27,171	244,535	3,058	3,669	1.00	2.00
May	271,706	27,171	244,535	3,306	3,968	1.00	2.00
Jun	271,706	27,171	244,535	8,020	9,623	3.00	4.00
Jul	271,706	27,171	244,535	7,740	9,288	3.00	4.00
Aug	271,706	27,171	244,535	7,577	9,092	3.00	4.00
Sep	271,706	27,171	244,535	5,718	6,862	2.00	3.00
Oct	271,706	27,171	244,535	3,259	3,911	1.00	2.00
Nov	271,706	27,171	244,535	3,104	3,725	1.00	2.00
Dec	271,706	27,171	244,535	3,173	3,808	1.00	2.00
Annual	271,706	27,171	244,535	4,474	5,369	2.00	2.00

LOWER TRENT

LONG-TERM AVERAGE ANNUAL WATER BUDGETS

Lower Trent 1

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	71	1	0	24	46
Feb	48	1	0	23	23
Mar	66	10	4	55	-3
Apr	68	40	4	53	-31
May	78	65	0	29	-16
Jun	76	100	0	13	-38
Jul	59	122	0	13	-77
Aug	81	92	0	13	-24
Sep	82	56	4	18	4
Oct	74	24	2	23	25
Nov	77	8	0	25	44
Dec	71	2	0	23	47
Annual	853	522	14	311	1

Lower Trent 2

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	78	1	-3	24	52
Feb	62	2	-3	27	32
Mar	75	10	0	63	-2
Apr	82	40	0	61	-24
May	78	80	0	26	-33
Jun	72	124	-3	12	-66
Jul	65	136	0	9	-84
Aug	79	87	0	8	-21
Sep	94	58	0	18	13
Oct	83	31	0	22	25
Nov	91	9	0	26	52
Dec	86	2	0	22	57
Annual	944	582	-9	319	3

Lower Trent 3

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	73	1	0	26	47
Feb	55	2	0	27	26
Mar	69	10	0	64	-6
Apr	79	42	0	62	-25
May	79	70	0	33	-25
Jun	77	110	-2	16	-47
Jul	63	133	0	14	-84
Aug	85	93	0	13	-21
Sep	92	59	0	24	10
Oct	82	27	0	27	28
Nov	90	9	0	28	53
Dec	74	2	0	24	48
Annual	917	557	-2	359	3

Lower Trent 4

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	68	1	0	21	45
Feb	53	1	0	22	30
Mar	62	10	2	54	-5
Apr	74	40	5	62	-33
May	78	65	0	34	-22
Jun	77	103	0	15	-41
Jul	67	125	0	14	-74
Aug	83	93	0	14	-25
Sep	91	58	2	22	8
Oct	74	26	2	25	21
Nov	88	8	2	24	53
Dec	72	2	0	26	44
Annual	887	533	13	332	3

SURFACE WATER STRESS CALCULATIONS

Lower Trent 1

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	19	11	8	0.01	0.01	0.1	0.1
Feb	19	10	10	0.01	0.01	0.1	0.1
Mar	52	33	19	0.01	0.01	0.05	0.1
Apr	52	34	18	0.01	0.01	0.05	0.1
May	28	17	10	0.01	0.01	0.1	0.1
Jun	12	7	6	0.01	0.01	0.2	0.2
Jul	12	7	5	0.01	0.01	0.2	0.2
Aug	12	8	4	0.01	0.01	0.2	0.3
Sep	14	9	5	0.01	0.01	0.2	0.2
Oct	20	13	7	0.01	0.01	0.1	0.2
Nov	22	15	7	0.01	0.01	0.1	0.1
Dec	20	13	7	0.01	0.01	0.1	0.1

Lower Trent 2

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)	Percent Water Demand (%)		
				Current	Future	Current	Future
Jan	19	11	8	0.1	0.1	1	2
Feb	23	11	11	0.1	0.1	1	1
Mar	59	37	22	0.1	0.1	0	1
Apr	59	39	21	0.1	0.1	1	1
May	25	16	10	0.2	0.2	2	2
Jun	11	6	5	0.2	0.2	3	4
Jul	8	5	3	0.2	0.2	5	6
Aug	8	5	3	0.2	0.2	6	7
Sep	14	9	5	0.2	0.2	4	4
Oct	20	13	7	0.1	0.1	2	2
Nov	23	15	7	0.1	0.1	1	2
Dec	19	12	7	0.1	0.1	1	2

Lower Trent 3

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	20	12	9	0	0	0	0
Feb	23	11	12	0	0	0	0
Mar	61	38	22	0	0	0	0
Apr	60	39	21	0	0	0	0
May	32	20	12	0	0	0	0
Jun	15	8	7	0	0	0	0
Jul	12	8	5	0.1	0.1	1	2
Aug	12	8	4	0.1	0.1	2	2
Sep	18	12	6	0	0	0	0
Oct	24	16	8	0	0	0	0
Nov	25	16	8	0	0	0	0
Dec	21	13	8	0	0	0	0

Lower Trent 4

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)	Percent Water Demand (%)		
				Current	Future	Current	Future
Jan	17	10	7	0.002	0.003	0.03	0.04
Feb	18	9	9	0.002	0.003	0.02	0.03
Mar	51	32	19	0.002	0.003	0.01	0.02
Apr	60	39	21	0.002	0.003	0.01	0.01
May	33	21	12	0.002	0.003	0.02	0.02
Jun	14	7	6	0.02	0.03	0.4	0.5
Jul	13	8	5	0.02	0.03	0.5	1
Aug	12	8	4	0.1	0.1	2	3
Sep	17	11	6	0.002	0.003	0.04	0.1
Oct	22	14	8	0.002	0.003	0.03	0.04
Nov	21	14	7	0.002	0.003	0.04	0.04
Dec	23	14	8	0.002	0.003	0.03	0.03

GROUNDWATER STRESS CALCULATIONS

Lower Trent 1

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	147,775	14,778	132,998	1,096	1,315	1	1
Feb	147,775	14,778	132,998	1,214	1,456	1	1
Mar	147,775	14,778	132,998	1,096	1,315	1	1
Apr	147,775	14,778	132,998	1,133	,359	1	1
May	147,775	14,778	132,998	1,603	1,924	1	1
Jun	147,775	14,778	132,998	3,378	4,054	3	3
Jul	147,775	14,778	132,998	3,269	3,923	2	3
Aug	147,775	14,778	132,998	3,269	3,923	2	3
Sep	147,775	14,778	132,998	1,656	1,988	1	1
Oct	147,775	14,778	132,998	1,096	1,315	1	1
Nov	147,775	14,778	132,998	1,133	1,359	1	1
Dec	147,775	14,778	132,998	1,096	1,315	1	1
Annual	147,775	14,778	132,998	1,753	2,104	1	2

Lower Trent 2

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	20,226	2,023	18,203	707	849	4	5
Feb	20,226	2,023	18,203	783	939	4	5
Mar	20,226	2,023	18,203	707	849	4	5
Apr	20,226	2,023	18,203	731	877	4	5
May	20,226	2,023	18,203	707	849	4	5
Jun	20,226	2,023	18,203	1,001	1,202	6	7
Jul	20,226	2,023	18,203	969	1,163	5	6
Aug	20,226	2,023	18,203	969	1,163	5	6
Sep	20,226	2,023	18,203	731	877	4	5
Oct	20,226	2,023	18,203	707	849	4	5
Nov	20,226	2,023	18,203	731	877	4	5
Dec	20,226	2,023	18,203	707	849	4	5
Annual	20,226	2,023	18,203	788	945	4	5

Lower Trent 3

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	129,093	12,909	116,183	577	693	0.5	1
Feb	129,093	12,909	116,183	639	767	1	1
Mar	129,093	12,909	116,183	577	693	0.5	1
Apr	129,093	12,909	116,183	597	716	1	1
May	129,093	12,909	116,183	577	693	0	1
Jun	129,093	12,909	116,183	2,160	2,592	2	2
Jul	129,093	12,909	116,183	2,091	2,509	2	2
Aug	129,093	12,909	116,183	2,091	2,509	2	2
Sep	129,093	12,909	116,183	597	716	1	1
Oct	129,093	12,909	116,183	577	693	0.5	1
Nov	129,093	12,909	116,183	597	716	1	1
Dec	129,093	12,909	116,183	577	693	0.5	1
Annual	129,093	12,909	116,183	972	1,166	1	1

Lower Trent 4

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	155,017	15,502	139,516	3,620	4,344	3	3
Feb	155,017	15,502	139,516	3,869	4,642	3	3
Mar	155,017	15,502	139,516	3,581	4,297	3	3
Apr	155,017	15,502	139,516	3,622	4,347	3	3
May	155,017	15,502	139,516	3,577	4,292	3	3
Jun	155,017	15,502	139,516	6,424	7,708	5	6
Jul	155,017	15,502	139,516	6,112	7,334	4	5
Aug	155,017	15,502	139,516	6,933	8,319	5	6
Sep	155,017	15,502	139,516	3,752	4,502	3	3
Oct	155,017	15,502	139,516	3,598	4,317	3	3
Nov	155,017	15,502	139,516	3,718	4,461	3	3
Dec	155,017	15,502	139,516	3,768	4,522	3	3
Annual	155,017	15,502	139,516	4,381	5,257	3	4

BAY OF QUINTE TRIBUTARIES

LONG-TERM AVERAGE ANNUAL WATER BUDGETS

Bay of Quinte 1

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	85	1	0	32	52
Feb	64	2	0	38	24
Mar	78	9	1	74	-8
Apr	81	39	1	64	-24
May	76	73	0	33	-31
Jun	74	115	0	12	-54
Jul	64	140	0	11	-88
Aug	77	100	0	9	-33
Sep	92	63	0	14	14
Oct	83	29	0	15	39
Nov	97	10	1	27	59
Dec	91	3	2	31	55
Annual	962	585	5	360	3

Bay of Quinte 2

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	76	1	0	34	41
Feb	57	2	0	38	17
Mar	70	10	1	66	-8
Apr	78	38	1	54	-17
May	74	67	0	29	-23
Jun	75	106	0	12	-44
Jul	63	131	0	11	-80
Aug	78	102	0	9	-34
Sep	89	61	0	14	13
Oct	79	26	0	15	37
Nov	94	10	1	29	53
Dec	84	3	1	33	47
Annual	916	557	4	344	2

SURFACE WATER STRESS CALCULATIONS

Bay of Quinte 1

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	25	15	11	0.9	1.1	9	10
Feb	32	16	16	0.9	1.1	6	7
Mar	70	44	26	0.9	1.1	4	4
Apr	62	40	22	0.9	1.1	4	5
May	32	20	12	0.9	1.1	8	9
Jun	11	6	5	0.9	1.1	18	21
Jul	10	6	4	0.9	1.1	23	28
Aug	8	5	3	0.9	1.1	32	39
Sep	11	7	4	0.9	1.1	26	31
Oct	13	9	4	0.9	1.1	21	25
Nov	24	16	8	0.9	1.1	12	14
Dec	27	17	10	0.9	1.1	9	11

Bay of Quinte 2

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	27	16	11	0	0	0	0
Feb	32	16	16	0	0	0	0
Mar	63	40	23	0	0	0	0
Apr	53	34	18	0	0	0	0
May	28	18	11	0	0	0	0
Jun	11	6	5	0	0	0	0
Jul	10	6	4	0	0	0	0
Aug	8	5	3	0	0	0	0
Sep	11	7	4	0	0	0	0
Oct	13	9	5	0	0	0	0
Nov	26	17	9	0	0	0	0
Dec	29	18	11	0	0	0	0

GROUNDWATER STRESS CALCULATIONS

Bay of Quinte 1

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	5406	541	4866	31	37	1	1
Feb	5406	541	4866	34	41	1	1
Mar	5406	541	4866	31	37	1	1
Apr	5406	541	4866	100	120	2	2
May	5406	541	4866	97	116	2	2
Jun	5406	541	4866	192	231	4	5
Jul	5406	541	4866	186	223	4	5
Aug	5406	541	4866	186	223	4	5
Sep	5406	541	4866	100	120	2	2
Oct	5406	541	4866	97	116	2	2
Nov	5406	541	4866	100	120	2	2
Dec	5406	541	4866	31	37	1	1
Annual	5406	541	4866	99	118	2	2

Bay of Quinte 2

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	13208	1321	11887	114	136	1	1
Feb	13208	1321	11887	126	151	1	1
Mar	13208	1321	11887	114	136	1	1
Apr	13208	1321	11887	117	141	1	1
May	13208	1321	11887	114	136	1	1
Jun	13208	1321	11887	444	533	4	4
Jul	13208	1321	11887	430	516	4	4
Aug	13208	1321	11887	430	516	4	4
Sep	13208	1321	11887	117	141	1	1
Oct	13208	1321	11887	114	136	1	1
Nov	13208	1321	11887	117	141	1	1
Dec	13208	1321	11887	114	136	1	1
Annual	13208	1321	11887	196	235	2	2

LONG-TERM AVERAGE ANNUAL WATER BUDGETS

Proctor 1

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	79	1	-2	35	44
Feb	60	2	0	38	20
Mar	73	10	0	70	-8
Apr	80	40	0	68	-29
May	78	74	-4	35	-28
Jun	74	107	-8	20	-45
Jul	64	130	-6	17	-78
Aug	77	100	-6	15	-33
Sep	92	66	-6	20	11
Oct	79	30	-6	20	34
Nov	94	9	-6	26	64
Dec	85	3	-2	33	50
Annual	935	572	-46	397	2

Proctor 2

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	86	1	-6	33	57
Feb	62	2	0	33	27
Mar	77	10	0	81	-14
Apr	81	40	-4	82	-37
May	80	80	-8	41	-33
Jun	75	122	-10	22	-60
Jul	62	142	-7	18	-91
Aug	83	97	-7	16	-24
Sep	93	62	-7	21	16
Oct	86	31	-7	22	40
Nov	97	9	-7	30	65
Dec	85	2	-7	32	57
Annual	966	597	-70	431	3

Proctor 3

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	86	1	0	28	57
Feb	62	2	0	33	27
Mar	77	10	10	68	-10
Apr	81	40	12	67	-40
May	80	76	0	33	-33
Jun	75	119	-6	16	-58
Jul	62	140	-4	12	-91
Aug	83	98	-4	10	-26
Sep	93	62	-4	15	15
Oct	86	30	-4	17	41
Nov	97	9	0	23	65
Dec	85	2	0	25	57
Annual	966	589	0	346	3

Shelter 1

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	68	1	0	34	32
Feb	50	2	0	41	8
Mar	60	10	7	54	-11
Apr	71	42	7	47	-25
May	74	64	0	25	-15
Jun	78	99	0	12	-32
Jul	68	121	0	11	-64
Aug	79	98	0	9	-28
Sep	95	61	4	11	19
Oct	74	26	4	13	31
Nov	94	9	4	26	54
Dec	77	3	4	36	34
Annual	886	536	30	319	0

Shelter 2

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	68	1	0	32	34
Feb	50	2	0	37	11
Mar	60	10	0	58	-9
Apr	71	39	0	59	-27
May	74	66	0	30	-22
Jun	78	103	-3	16	-38
Jul	68	124	-3	15	-68
Aug	79	97	-3	13	-27
Sep	95	60	-3	18	19
Oct	74	27	-3	20	30
Nov	94	9	-3	28	59
Dec	77	3	-1	36	39
Annual	886	541	-19	362	1

Shelter 3

Month	Water Budget Components (mm)				
	P	ET	Gnet	Q	S
Jan	68	1	0	33	33
Feb	50	2	0	40	8
Mar	60	10	4	56	-11
Apr	71	39	4	50	-23
May	74	67	0	25	-18
Jun	78	96	0	12	-29
Jul	68	118	0	11	-61
Aug	79	104	0	9	-35
Sep	95	64	1	13	16
Oct	74	27	2	14	30
Nov	94	9	2	26	56
Dec	77	3	2	37	35
Annual	886	541	15	326	1

SURFACE WATER STRESS CALCULATIONS

Proctor 1

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	28	16	12	0	0	0	0
Feb	32	16	16	0	0	0	0
Mar	66	42	24	0	0	0	0
Apr	66	43	23	0	0	0	0
May	34	21	13	0	0	0	0
Jun	18	10	8	0	0	0	0
Jul	15	9	6	0	0	0	0
Aug	13	9	5	0	0	0	0
Sep	15	10	5	0	0	0	0
Oct	18	12	6	0	0	0	0
Nov	23	15	8	0	0	0	0
Dec	29	18	11	0	0	0	0

Proctor 2

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	27	16	11	0	0	0	0
Feb	28	14	14	0	0	0	0
Mar	76	48	28	0	0	0	0
Apr	79	52	28	0	0	0	0
May	40	25	15	0	0	0	0
Jun	21	11	9	0	0	0	0
Jul	16	9	6	0	0	0	0
Aug	14	9	5	0	0	0	0
Sep	16	11	5	0	0	0	0
Oct	19	13	7	0	0	0	0
Nov	27	18	9	0	0	0	0
Dec	28	18	10	0	0	0	0

Proctor 3

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	22	13	9	1	1	6	7
Feb	28	14	14	1	1	4	5
Mar	64	40	24	1	1	2	3
Apr	65	42	23	1	1	2	3
May	31	20	12	1	1	5	6
Jun	14	8	7	1	1	8	10
Jul	10	6	4	1	1	13	16
Aug	9	6	3	1	1	18	22
Sep	11	8	4	1	1	15	18
Oct	15	10	5	1	1	10	13
Nov	20	13	7	1	1	8	10
Dec	22	14	8	1	1	7	8

Shelter 1

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	27	16	11	0	0	0	0
Feb	34	17	17	0	0	0	0
Mar	51	32	19	0	0	0	0
Apr	46	30	16	0	0	0	0
May	24	15	9	0	0	0	0
Jun	11	6	5	0	0	0	0
Jul	10	6	4	0	0	0	0
Aug	9	6	3	0	0	0	0
Sep	8	6	3	0	0	0	0
Oct	12	8	4	0	0	0	0
Nov	23	15	8	0	0	0	0
Dec	32	20	12	0	0	0	0

Shelter 2

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	26	15	11	0	0	0	0
Feb	31	15	16	0	0	0	0
Mar	55	35	20	0	0	0	0
Apr	57	37	20	0	0	0	0
May	28	18	11	0	0	0	0
Jun	15	8	7	0	0	0	0
Jul	13	8	5	0	0	0	0
Aug	12	8	4	0	0	0	0
Sep	14	9	5	0	0	0	0
Oct	17	11	6	0	0	0	0
Nov	24	16	8	0	0	0	0
Dec	32	20	12	0	0	0	0

Shelter 3

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	26	15	11	0	0	0	0
Feb	33	17	17	0	0	0	0
Mar	53	33	19	0	0	0	0
Apr	48	31	17	0	0	0	0
May	24	15	9	0	0	0	0
Jun	11	6	5	0	0	0	0
Jul	10	6	4	0	0	0	0
Aug	9	6	3	0	0	0	0
Sep	10	7	3	0	0	0	0
Oct	13	8	4	0	0	0	0
Nov	23	15	8	0	0	0	0
Dec	32	20	12	0	0	0	0

GROUNDWATER STRESS CALCULATIONS

Proctor 1

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	32,638	3,264	29,374	2,979	3,575	10	12
Feb	32,638	3,264	29,374	3,041	3,649	10	12
Mar	32,638	3,264	29,374	2,814	3,377	10	11
Apr	32,638	3,264	29,374	2,851	3,421	10	12
May	32,638	3,264	29,374	2,877	3,452	10	12
Jun	32,638	3,264	29,374	4,070	4,884	14	17
Jul	32,638	3,264	29,374	3,983	4,780	14	16
Aug	32,638	3,264	29,374	3,796	4,555	13	16
Sep	32,638	3,264	29,374	3,145	3,775	11	13
Oct	32,638	3,264	29,374	2,954	3,545	10	12
Nov	32,638	3,264	29,374	2,967	3,560	10	12
Dec	32,638	3,264	29,374	2,841	3,409	10	12
Annual	32,638	3,264	29,374	3,193	3,832	11	13

Proctor 2

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	22,548	2,255	20,293	39	47	0.2	0.2
Feb	22,548	2,255	20,293	43	52	0.2	0.3
Mar	22,548	2,255	20,293	39	47	0.2	0.2
Apr	22,548	2,255	20,293	41	49	0.2	0.2
May	22,548	2,255	20,293	39	47	0.2	0.2
Jun	22,548	2,255	20,293	1,451	1,742	7	9
Jul	22,548	2,255	20,293	1,405	1,686	7	8
Aug	22,548	2,255	20,293	1,475	1,770	7	9
Sep	22,548	2,255	20,293	957	1,148	5	6
Oct	22,548	2,255	20,293	39	47	0.2	0.2
Nov	22,548	2,255	20,293	41	49	0.2	0.2
Dec	22,548	2,255	20,293	39	47	0.2	0.2
Annual	22,548	2,255	20,293	467	561	2	3

Proctor 3

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	20,663	2,066	18,597	4,160	4,992	22	27
Feb	20,663	2,066	18,597	3,787	4,544	20	24
Mar	20,663	2,066	18,597	4,180	5,016	22	27
Apr	20,663	2,066	18,597	4,185	5,023	23	27
May	20,663	2,066	18,597	6,493	7,791	35	42
Jun	20,663	2,066	18,597	6,691	8,029	36	43
Jul	20,663	2,066	18,597	7,286	8,743	39	47
Aug	20,663	2,066	18,597	7,331	8,798	39	47
Sep	20,663	2,066	18,597	5,838	7,005	31	38
Oct	20,663	2,066	18,597	5,285	6,342	28	34
Nov	20,663	2,066	18,597	4,175	5,010	22	27
Dec	20,663	2,066	18,597	4,061	4,873	22	26
Annual	20,663	2,066	18,597	5,289	6,347	28	34

Shelter 1

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	5,830	583	5,247	6	8	0.1	0.1
Feb	5,830	583	5,247	7	9	0.1	0.2
Mar	5,830	583	5,247	6	8	0.1	0.1
Apr	5,830	583	5,247	7	8	0.1	0.2
May	5,830	583	5,247	6	8	0.1	0.1
Jun	5,830	583	5,247	89	107	2	2
Jul	5,830	583	5,247	87	104	2	2
Aug	5,830	583	5,247	87	104	2	2
Sep	5,830	583	5,247	7	8	0.1	0.2
Oct	5,830	583	5,247	6	8	0.1	0.1
Nov	5,830	583	5,247	7	8	0.1	0.2
Dec	5,830	583	5,247	6	8	0.1	0.1
Annual	5,830	583	5,247	27	32	1	1

Shelter 2

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	53,139	5,314	47,825	34	41	0.1	0.1
Feb	53,139	5,314	47,825	38	45	0.1	0.1
Mar	53,139	5,314	47,825	34	41	0.1	0.1
Apr	53,139	5,314	47,825	35	42	0.1	0.1
May	53,139	5,314	47,825	34	41	0.1	0.1
Jun	53,139	5,314	47,825	471	565	1	1
Jul	53,139	5,314	47,825	455	547	1	1
Aug	53,139	5,314	47,825	455	547	1	1
Sep	53,139	5,314	47,825	35	42	0.1	0.1
Oct	53,139	5,314	47,825	34	41	0.1	0.1
Nov	53,139	5,314	47,825	35	42	0.1	0.1
Dec	53,139	5,314	47,825	34	41	0.1	0.1
Annual	53,139	5,314	47,825	141	170	0.3	0.4

Shelter 3

Month	Supply (m3/day)	Reserve (m3/day)	Supply - Reserve (m3/day)	Demand (m3/day)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	22,314	2,231	20,083	497	597	2	3
Feb	22,314	2,231	20,083	548	657	3	3
Mar	22,314	2,231	20,083	497	596	2	3
Apr	22,314	2,231	20,083	514	617	3	3
May	22,314	2,231	20,083	506	607	3	3
Jun	22,314	2,231	20,083	908	1,089	5	5
Jul	22,314	2,231	20,083	870	1,044	4	5
Aug	22,314	2,231	20,083	857	1,029	4	5
Sep	22,314	2,231	20,083	517	620	3	3
Oct	22,314	2,231	20,083	497	596	2	3
Nov	22,314	2,231	20,083	511	614	3	3
Dec	22,314	2,231	20,083	497	596	2	3
Annual	22,314	2,231	20,083	602	722	3	4

TIER 1 LONG-TERM MONTHLY STRESS CALCULATIONS (UNGAUGED SUBWATERSHEDS)

Norland

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	39	21	18	0.08	0.1	0.5	0.5
Feb	28	18	10	0.08	0.1	0.8	1
Mar	31	19	12	0.08	0.1	0.7	0.9
Apr	46	22	24	0.08	0.1	0.3	0.4
May	42	20	22	0.08	0.1	0.4	0.5
Jun	36	26	10	0.09	0.1	0.8	1
Jul	39	28	11	0.12	0.14	1.1	1.3
Aug	39	31	8	0.12	0.14	1.6	1.9
Sep	36	27	10	0.08	0.1	0.9	1.1
Oct	32	21	11	0.08	0.1	0.7	0.9
Nov	33	15	18	0.08	0.1	0.5	0.6
Dec	42	17	25	0.08	0.1	0.3	0.4

Kinmount

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	30	15	15	0.06	0.07	0.4	0.5
Feb	21	12	9	0.06	0.07	0.6	0.7
Mar	42	19	23	0.06	0.07	0.3	0.3
Apr	102	58	44	0.06	0.07	0.1	0.2
May	54	23	31	0.06	0.07	0.2	0.2
Jun	23	16	7	0.33	0.4	4.5	5.3
Jul	19	14	5	0.33	0.4	6.2	7.4
Aug	16	12	4	0.34	0.4	9.2	11
Sep	15	11	5	0.06	0.07	1.2	1.4
Oct	19	11	8	0.06	0.07	0.7	0.9
Nov	32	11	21	0.06	0.07	0.3	0.3
Dec	40	19	21	0.06	0.07	0.3	0.3

Fenelon Falls

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	34	17	16	0.06	0.07	0.4	0.4
Feb	24	14	10	0.06	0.07	0.6	0.7
Mar	38	19	18	0.06	0.07	0.3	0.4
Apr	80	44	36	0.06	0.07	0.2	0.2
May	49	22	28	0.06	0.07	0.2	0.3
Jun	28	20	8	0.16	0.2	2	2.3
Jul	27	20	8	0.18	0.21	2.3	2.8
Aug	25	20	5	0.18	0.22	3.5	4.2
Sep	24	17	7	0.06	0.07	0.9	1.1
Oct	24	15	9	0.06	0.07	0.7	0.8
Nov	32	12	20	0.06	0.07	0.3	0.4
Dec	41	18	23	0.06	0.07	0.3	0.3

Lindsay

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	19	8	11	0.05	0.06	0.4	0.5
Feb	19	10	9	0.04	0.05	0.5	0.6
Mar	41	15	26	0.04	0.05	0.2	0.2
Apr	66	30	36	0.04	0.05	0.1	0.1
May	20	6	15	0.18	0.22	1.3	1.5
Jun	5	1	3	0.23	0.28	6.7	8
Jul	2	0	2	0.23	0.28	11	13
Aug	1	0	1	0.22	0.27	21	25
Sep	1	0	1	0.18	0.22	22	26
Oct	1	0	1	0.05	0.06	3.6	4.3
Nov	9	0	8	0.04	0.04	0.4	0.5
Dec	12	4	9	0.04	0.05	0.4	0.5

Southview Estates

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	45	22	24	0.05	0.06	0.2	0.3
Feb	37	21	16	0.05	0.06	0.3	0.4
Mar	71	30	41	0.05	0.06	0.1	0.2
Apr	130	65	64	0.05	0.06	0.1	0.1
May	59	23	36	0.08	0.1	0.2	0.3
Jun	26	17	10	0.17	0.21	1.8	2.1
Jul	23	15	8	0.18	0.22	2.4	2.8
Aug	20	15	5	0.18	0.22	3.8	4.5
Sep	19	13	6	0.08	0.1	1.4	1.7
Oct	20	12	8	0.06	0.07	0.7	0.8
Nov	34	10	24	0.05	0.06	0.2	0.3
Dec	44	18	26	0.05	0.06	0.2	0.2

Bobcaygeon

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	45	22	24	0.05	0.06	0.2	0.3
Feb	38	21	16	0.05	0.06	0.3	0.4
Mar	71	30	41	0.05	0.06	0.1	0.1
Apr	132	67	65	0.05	0.06	0.1	0.1
May	60	23	37	0.08	0.1	0.2	0.3
Jun	27	17	10	0.16	0.2	1.7	2
Jul	22	15	8	0.17	0.21	2.3	2.7
Aug	19	15	5	0.18	0.21	3.7	4.4
Sep	18	13	6	0.08	0.1	1.4	1.7
Oct	20	11	9	0.06	0.07	0.7	0.8
Nov	35	10	25	0.05	0.06	0.2	0.2
Dec	45	18	27	0.05	0.06	0.2	0.2

Lakefield

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	38	24	14	0.04	0.05	0.3	0.3
Feb	30	20	11	0.04	0.04	0.4	0.4
Mar	33	20	12	0.04	0.05	0.3	0.4
Apr	56	27	29	0.04	0.05	0.1	0.2
May	38	15	24	0.07	0.09	0.3	0.4
Jun	16	10	6	0.13	0.16	2.2	2.6
Jul	12	7	5	0.14	0.17	3.1	3.8
Aug	11	8	3	0.15	0.18	5.1	6.2
Sep	13	8	5	0.07	0.09	1.5	1.8
Oct	20	11	9	0.05	0.05	0.5	0.6
Nov	30	13	17	0.04	0.05	0.2	0.3
Dec	40	22	18	0.04	0.05	0.2	0.3

Peterborough

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	38	24	14	0.09	0.1	0.6	0.7
Feb	30	20	11	0.09	0.1	0.8	1
Mar	33	20	13	0.09	0.1	0.7	0.8
Apr	56	27	29	0.09	0.11	0.3	0.4
May	38	15	24	0.12	0.15	0.5	0.6
Jun	16	10	6	0.18	0.22	3	3.6
Jul	12	7	5	0.19	0.23	4.2	5.1
Aug	11	8	3	0.2	0.24	6.8	8.2
Sep	13	8	5	0.12	0.15	2.5	2.9
Oct	20	11	9	0.1	0.12	1.1	1.3
Nov	30	13	17	0.09	0.11	0.5	0.6
Dec	40	22	18	0.09	0.11	0.5	0.6

Hastings

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	32	21	11	0.08	0.09	0.7	0.8
Feb	29	17	12	0.08	0.09	0.6	0.8
Mar	36	22	14	0.08	0.09	0.5	0.7
Apr	59	30	29	0.1	0.12	0.3	0.4
May	34	14	20	0.12	0.15	0.6	0.7
Jun	14	8	7	0.18	0.21	2.6	3.2
Jul	9	5	4	0.19	0.22	4.6	5.6
Aug	8	6	3	0.19	0.23	6.7	8
Sep	10	6	4	0.12	0.15	3	3.6
Oct	15	9	7	0.1	0.12	1.4	1.7
Nov	24	10	14	0.08	0.09	0.6	0.7
Dec	30	16	14	0.08	0.1	0.6	0.7

Marmora

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	32	21	11	0.08	0.09	0.7	0.8
Feb	29	17	12	0.08	0.09	0.6	0.8
Mar	36	22	14	0.08	0.09	0.5	0.7
Apr	59	30	29	0.1	0.12	0.3	0.4
May	34	14	20	0.12	0.15	0.6	0.7
Jun	14	8	7	0.18	0.21	2.6	3.2
Jul	9	5	4	0.19	0.22	4.6	5.6
Aug	8	6	3	0.19	0.23	6.7	8
Sep	10	6	4	0.12	0.15	3	3.6
Oct	15	9	7	0.1	0.12	1.4	1.7
Nov	24	10	14	0.08	0.09	0.6	0.7
Dec	30	16	14	0.08	0.1	0.6	0.7

Marmora

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	33	22	11	0.09	0.11	0.8	1
Feb	31	19	11	0.09	0.11	0.8	0.9
Mar	44	26	17	0.09	0.11	0.5	0.6
Apr	75	40	34	0.11	0.13	0.3	0.4
May	40	27	13	0.13	0.15	1	1.2
Jun	17	10	7	0.17	0.21	2.4	2.9
Jul	10	5	5	0.18	0.22	3.6	4.3
Aug	8	5	3	0.19	0.22	5.4	6.5
Sep	10	6	4	0.13	0.15	3.3	4
Oct	18	10	8	0.11	0.13	1.3	1.5
Nov	28	11	18	0.09	0.11	0.5	0.6
Dec	36	22	14	0.09	0.11	0.6	0.8

Warkworth

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	23	15	7	0.04	0.04	0.5	0.6
Feb	23	14	10	0.04	0.04	0.4	0.5
Mar	61	38	23	0.04	0.04	0.2	0.2
Apr	48	31	18	0.04	0.04	0.2	0.2
May	29	20	8	0.04	0.04	0.4	0.5
Jun	18	10	7	0.04	0.04	0.5	0.6
Jul	10	7	3	0.04	0.04	1.2	1.5
Aug	11	7	4	0.04	0.04	1	1.2
Sep	14	10	5	0.04	0.04	0.8	0.9
Oct	20	15	5	0.04	0.04	0.8	0.9
Nov	25	22	2	0.04	0.04	1.5	1.8
Dec	24	18	6	0.04	0.04	0.6	0.8

Frankford

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	33	22	11	0.08	0.1	0.7	0.9
Feb	31	19	11	0.08	0.1	0.7	0.9
Mar	44	26	17	0.08	0.1	0.5	0.6
Apr	75	40	34	0.1	0.12	0.3	0.3
May	40	27	13	0.12	0.14	0.9	1.1
Jun	17	10	7	0.16	0.19	2.2	2.7
Jul	10	5	5	0.17	0.2	3.3	4
Aug	8	5	3	0.18	0.21	5.2	6.2
Sep	10	6	4	0.12	0.14	3.1	3.7
Oct	18	10	8	0.1	0.12	1.2	1.4
Nov	28	11	18	0.08	0.1	0.5	0.6
Dec	36	22	14	0.08	0.1	0.6	0.7

Batawa

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	33	22	11	0.08	0.1	0.7	0.9
Feb	31	19	11	0.08	0.1	0.7	0.8
Mar	44	26	17	0.08	0.1	0.5	0.6
Apr	75	40	34	0.1	0.12	0.3	0.3
May	40	27	13	0.12	0.14	0.9	1.1
Jun	17	10	7	0.16	0.19	2.2	2.7
Jul	10	5	5	0.17	0.2	3.3	4
Aug	8	5	3	0.18	0.21	5.1	6.2
Sep	10	6	4	0.12	0.14	3	3.6
Oct	18	10	8	0.1	0.12	1.2	1.4
Nov	28	11	18	0.08	0.1	0.5	0.6
Dec	36	22	14	0.08	0.1	0.6	0.7

Trenton

Month	Supply (mm)	Reserve (mm)	Supply - Reserve (mm)	Demand (mm)		Percent Water Demand (%)	
				Current	Future	Current	Future
Jan	33	22	11	0.11	0.13	1	1.1
Feb	31	19	11	0.11	0.13	0.9	1.1
Mar	44	26	17	0.11	0.13	0.6	0.7
Apr	75	40	34	0.12	0.15	0.4	0.4
May	40	27	13	0.14	0.17	1.1	1.3
Jun	17	10	7	0.18	0.22	2.6	3.1
Jul	10	5	5	0.19	0.23	3.8	4.6
Aug	8	5	3	0.21	0.25	6	7.3
Sep	10	6	4	0.14	0.17	3.7	4.4
Oct	18	10	8	0.12	0.15	1.5	1.8
Nov	28	11	18	0.11	0.13	0.6	0.7
Dec	36	22	14	0.11	0.13	0.8	0.9

SUMMARY OF PERMITS TO TAKE WATER BY SUBWATERSHED (SURFACE WATER)

Subwatershed	Catchment	Permit to Take Water No.	Issue Date	Expiry Date	Maximum Permitted Water Takings					Purpose of Permit
					Litres per Minute	Max Litres per Day	Max Hours per Day	Average Hours per Day	Days per Year	
Burnt River	BURNT-2	99-P-4004	1/14/1999	9/30/2024	20,639	12,384,666	10	0	100	Commercial - Golf Course Irrigation
		97-P-4122	10/22/1997	10/22/2022	2,200	1,360,000	10	8	100	Commercial - Golf Course Irrigation
		01-P-4069	12/4/2001	12/4/2011	819	0	0	0	0	Miscellaneous - Wildlife Conservation
		01-P-4069	12/4/2001	12/4/2011	819	0	0	0	0	Miscellaneous - Wildlife Conservation
		01-P-4069	12/4/2001	12/4/2011	819	0	0	0	0	Miscellaneous - Wildlife Conservation
		01-P-4069	12/4/2001	12/4/2011	10,819	0	0	0	0	Miscellaneous - Wildlife Conservation
		01-P-4069	12/4/2001	12/4/2011	1,637	0	0	0	0	Miscellaneous - Wildlife Conservation
	BURNT-4	0823-5ZEP6X	7/6/2004	7/6/2014	8,456	163,248	24	0	365	Miscellaneous - Wildlife Conservation
		0823-5ZEP6X	7/6/2004	7/6/2014	8,438	162,890	24	0	365	Miscellaneous - Wildlife Conservation
		0823-5ZEP6X	7/6/2004	7/6/2014	8,438	162,890	24	0	365	Miscellaneous - Wildlife Conservation
		0823-5ZEP6X	7/6/2004	7/6/2014	7,418	143,200	24	0	365	Miscellaneous - Wildlife Conservation
		0823-5ZEP6X	7/6/2004	7/6/2014	6,231	120,288	24	0	365	Miscellaneous - Wildlife Conservation
		4781-649PDW	8/30/2004	8/31/2014	83	119,520	24	0	365	Water Supply - Communal
Crowe River	CROWE-1	01-P-4021	5/25/2001	5/25/2011	1,325	1,908,000	24	24	365	Industrial - Aggregate Washing
		97-P-4042	6/15/1983		917,471	0	24	24	365	Miscellaneous - Wildlife Conservation
	CROWE-3	92-P-3112	11/20/1992	1/30/2014	6,000	518,400	24	19	365	Industrial - Power Production
		95-P-5015	11/24/1995	3/31/2006	40	200,000	9	6	200	Water Supply - Municipal
	CROWE-4	2512-648R8M	10/14/2004	8/31/2014	43,800	63,072,000	24	0	365	Recreational - Wetlands
	CROWE-5	87-P-4084	8/11/2003	8/11/2013	909	1,309,248	24	24	365	Water Supply - Municipal
		00-P-4007	1/10/2000	1/10/2010	1,560,000	0	24	24	365	Miscellaneous - Dams and Reservoirs
Gull River	GULL-2	02-P-4059	10/25/2002	9/30/2012	833	109,000	14	10	150	Water Supply - Campgrounds
		99-P-4001	1/8/1999	1/31/2009	227	100,000	0	0	122	Water Supply - Campgrounds
	GULL-5	89-P-3015	3/16/1989	4/9/2048	23,000	33,120,000	24	24	365	Industrial - Power Production
		98-P-4098	10/26/1998	10/30/2008	3,637	1,944,233	8	2	60	Commercial - Golf Course Irrigation
		02-P-4056	10/10/2002	10/31/2012	170	244,800	24	8	365	
		02-P-4057	10/10/2002	10/31/2012	170	244,800	24	8	365	
		03-P-4109	12/24/2003	12/24/2013	168	242,000	24	8	365	Water Supply - Communal
		3466-64DGNJ	10/14/2004	9/1/2014	10,941	211,220	24	0	365	Recreational - Wetlands
		3466-64DGNJ	10/14/2004	9/1/2014	7,418	143,200	24	0	365	Recreational - Wetlands
		3466-64DGNJ	10/14/2004	9/1/2014	5,786	111,696	24	0	365	Recreational - Wetlands
		3466-64DGNJ	10/14/2004	9/1/2014	5,786	111,696	24	0	365	Recreational - Wetlands
Kawartha Lake East	KLE-3	00-P-4022	2/29/2000	2/28/2010	689,401	801,840,000	0	0	0	Miscellaneous - Wildlife Conservation
		94-P-3040	5/30/1994	2/12/2014	132,743	190,680,000	24	24	365	Water Supply - Municipal
		86-P-3040	9/24/1986		3,000	43,176,000	0	0	365	Miscellaneous - Wildlife Conservation
		86-P-3036	9/30/1986		3,000	37,008,000	0	0	365	Miscellaneous - Wildlife Conservation
		99-P-4033	11/5/1999	11/6/2009	2,500	3,594,000	24	12	365	Water Supply - Municipal
		00-P-4129	10/11/2000	10/10/2010	909	109,104	2	1	365	Commercial - Other - Commercial
		00-P-4131	10/11/2000	10/10/2010	909	109,104	2	1	240	Commercial - Other - Commercial
		00-P-4128	10/11/2000	10/10/2010	909	109,104	2	1	240	Commercial - Other - Commercial

Subwatershed	Catchment	Permit to Take Water No.	Issue Date	Expiry Date	Maximum Permitted Water Takings					Purpose of Permit
					Litres per Minute	Max Litres per Day	Max Hours per Day	Average Hours per Day	Days per Year	
		84-P-3029	2/11/2004	2/10/2014	378	54,504	24	9	260	Industrial - Other - Industrial
		97-P-4051	11/21/1984		30,583	0	24	24	365	Miscellaneous - Wildlife Conservation
		97-P-4064	9/3/1982		3,398	0	24	24	365	Miscellaneous - Wildlife Conservation
	KLE-4	01-P-4040	10/25/2001	10/25/2011	100	143,000	24	12	365	Water Supply - Communal
		97-P-4047	7/15/1997		3,000	0	24	24	365	Miscellaneous - Wildlife Conservation
	KLE-5	00-P-4127	10/11/2000	10/10/2010	909	109,104	2	1	240	Commercial - Other - Commercial
Kawartha Lakes West (Northern & Central)	KLW-N1	91-P-3003	1/31/1991	3/31/2009	3,600	735,564	24	24	365	Water Supply - Municipal
		97-P-4028	6/3/1997		182	109,104	12	6	180	Commercial - Golf Course Irrigation
		97-P-4046	6/15/1987		3,000	0	24	24	365	Miscellaneous - Wildlife Conservation
	KLW-N2	97-P-4004	1/30/1997		50,000	72,000,000	24	24	365	Industrial - Power Production
		92-P-3084	9/16/1992	1/6/2013	2,847	4,100,000	24	13	365	Water Supply - Municipal
		2786-5ZDGBF	6/7/2004	6/7/2014	336	483,840	24	0	365	Water Supply - Municipal
		02-P-4023	2/25/2002	12/5/2012	250	360,000	21	17	184	Water Supply - Communal
		02-P-4023	2/25/2002	12/5/2012	250	150,000	1	1	181	Water Supply - Communal
		5717-64SKKU	9/27/2004	9/27/2014	516	125,000	24	0	365	Water Supply - Communal
		03-P-4098	10/10/2003	10/10/2013	350	110,000	24	18	200	Water Supply - Other - Water Supply
		03-P-4098	10/10/2003	10/10/2013	40	3,000	24	18	365	Water Supply - Other - Water Supply
	KLW-N3	04-P-4001	1/6/2003	1/6/2014	412	592,500	24	8	185	Water Supply - Municipal
	KLW-N4	02-P-4070	12/10/2002	12/10/2012	21,309	30,685,500	24	24	365	Water Supply - Municipal
		04-P-4038	3/3/2004	3/3/2014	1,137	818,280	12	8	180	Recreational - Aesthetics
		04-P-4038	3/3/2004	3/3/2014	1,137	818,280	12	8	180	Recreational - Aesthetics
		2786-5ZDGBF	6/7/2004	6/7/2014	336	483,840	24	0	365	Water Supply - Municipal
	KLW-N5	01-P-4072	12/7/2001	8/31/2012	600	41,000	10	9	40	Construction - Road Building
		01-P-4073	12/7/2001	8/31/2012	600	41,000	10	9	40	Construction - Road Building
		01-P-4074	12/7/2001	8/31/2012	600	41,000	10	9	40	Construction - Road Building
		01-P-4081	12/11/2001	8/31/2012	600	41,000	10	9	40	Construction - Road Building
	KLW-N6	6525-5ZQP5H	6/17/2004	6/17/2014	5,110	3,065,850	10	0	153	Agricultural - Other - Agricultural
		00-P-4132	10/11/2000	10/10/2010	909	109,104	2	1	240	Commercial - Other - Commercial
		01-P-4079	12/11/2001	8/31/2012	600	100,000	10	9	40	Construction - Road Building
		01-P-4075	12/7/2001	8/31/2012	600	41,000	10	9	40	Construction - Road Building
		01-P-4080	12/11/2001	8/31/2012	600	41,000	10	9	40	Construction - Road Building
		01-P-4076	12/7/2001	8/31/2012	600	41,000	10	9	40	Construction - Road Building
Kawartha Lakes West (Southern)	KLW-S1	97-P-3025	8/31/1998	8/31/2008	4,687	6,750,000	24	24	365	Miscellaneous - Wildlife Conservation
		97-P-3023	8/31/1998	8/31/2008	105	5,000,000	24	24	365	Miscellaneous - Wildlife Conservation
		97-P-4091	7/10/1997	7/8/2023	3,637	2,618,496	12	8	150	Commercial - Golf Course Irrigation
		97-P-3024	8/31/1998	8/31/2008	1,541	2,220,000	24	24	365	Miscellaneous - Wildlife Conservation
		5121-6FSPHB	9/26/2005	3/31/2015	900	1,296,000	24	0	365	Miscellaneous - Wildlife Conservation
		97-P-3024	8/31/1998	8/31/2008	708	1,020,000	24	24	365	Miscellaneous - Wildlife Conservation
		0667-6FVK56	9/29/2005	9/30/2015	1,800	486,000	4	0	50	Commercial - Other - Commercial
		2122-6HCPC5	10/25/2005	10/31/2007	1,140	410,000	6	0	5	Agricultural - Field and Pasture Crops
		2122-6HCPC5	10/25/2005	10/31/2007	1,140	410,000	6	0	5	Agricultural - Field and Pasture Crops
		2122-6HCPC5	10/25/2005	10/31/2007	190	91,000	8	0	25	Agricultural - Field and Pasture Crops

Subwatershed	Catchment	Permit to Take Water No.	Issue Date	Expiry Date	Maximum Permitted Water Takings					Purpose of Permit
					Litres per Minute	Max Litres per Day	Max Hours per Day	Average Hours per Day	Days per Year	
	KLW-S2	01-P-3003	2/28/2002	12/31/2012	475	684,000	24	0	150	Commercial - Golf Course Irrigation
		6810-6DTLNH	7/6/2005	12/31/2015	36	52,370	24	0	180	
	KLW-S3	97-P-4021	4/25/1997		18,184	17,456,640	16	14	250	Industrial - Aggregate Washing
		01-P-4077	12/11/2001	8/31/2012	600	100,000	10	9	40	Construction - Road Building
Lower Trent River	LT-1	87-P-3056	11/12/1987		6,250	117,192,000	0	0	0	Miscellaneous - Wildlife Conservation
		87-P-3057	11/12/1987		2,000	37,008,000	0	0	365	Miscellaneous - Wildlife Conservation
		92-P-3085	9/16/1992	12/18/2012	4,171	5,862,000	24	24	365	Water Supply - Municipal
		3075-655HHH	10/5/2004	10/5/2014	856	1,232,000	24	0	365	Water Supply - Municipal
		00-P-4124	9/15/2000	9/15/2010	40,000	325,000	24	24	365	Miscellaneous - Dams and Reservoirs
		2708-62AJ7A	7/6/2004	7/6/2014	12,759	246,304	24	0	365	Miscellaneous - Wildlife Conservation
		2708-62AJ7A	7/6/2004	7/6/2014	8,308	160,384	24	0	365	Miscellaneous - Wildlife Conservation
		5646-5ZKKX1	6/18/2004	6/18/2014	7,677	148,208	24	0	365	Miscellaneous - Wildlife Conservation
		2708-62AJ7A	7/6/2004	7/6/2014	7,418	143,200	24	0	365	Miscellaneous - Wildlife Conservation
		2708-62AJ7A	7/6/2004	7/6/2014	7,418	143,200	24	0	365	Miscellaneous - Wildlife Conservation
		97-P-4048	6/15/1987		3,000	0	24	24	365	Miscellaneous - Wildlife Conservation
		97-P-4058	7/15/1997		280,100	0	24	24	365	Miscellaneous - Wildlife Conservation
		92-P-3085	9/16/1992	12/18/2012	0	0	0	0	0	Water Supply - Municipal
		3065-649LQ4	8/30/2004	8/31/2014	3,840,000	0	24	0	365	Industrial - Power Production
	LT-2	89-P-4083	9/29/1989	2/4/2014	31,822	45,460,000	24	18	365	Water Supply - Municipal
		89-P-4092	11/17/1989	9/11/2008	227	136,380	10	8	40	Miscellaneous - Other - Miscellaneous
	LT-3	88-P-3067	11/6/1988	4/24/2008	3,637	1,091,040	8	2	60	Commercial - Golf Course Irrigation
		01-P-4058	11/21/2001	8/31/2011	1,818	872,832	8	5	14	Agricultural - Market Gardens / Flower
		96-P-4092	7/16/1996		2,500	500,000	6	2	60	Water Supply - Other - Water Supply
		4736-62AH6D	7/8/2004	7/8/2014	6,806	131,386	24	0	365	Miscellaneous - Wildlife Conservation
		4736-62AH6D	7/8/2004	7/8/2014	6,528	126,016	24	0	365	Miscellaneous - Wildlife Conservation
		4736-62AH6D	7/8/2004	7/8/2014	5,137	99,166	24	0	365	Miscellaneous - Wildlife Conservation
		4736-62AH6D	7/8/2004	7/8/2014	4,302	83,056	24	0	365	Miscellaneous - Wildlife Conservation
		4736-62AH6D	7/8/2004	7/8/2014	4,061	78,402	24	0	365	Miscellaneous - Wildlife Conservation
		4736-62AH6D	7/8/2004	7/8/2014	3,505	67,662	24	0	365	Miscellaneous - Wildlife Conservation
		4403-648P6K	8/30/2004	8/31/2014	##########	0	24	0	365	Miscellaneous - Wildlife Conservation
		97-P-4038	5/12/1983		125,727	0	24	24	365	Miscellaneous - Wildlife Conservation
	LT-4	97-P-4041	6/15/1983		5,947	228,216,000	24	24	365	Miscellaneous - Wildlife Conservation
		86-P-4055	8/29/1986		6,000	8,640,000	24	24	273	Miscellaneous - Wildlife Conservation
		90-P-4067	8/21/1995	7/19/2011	2,114	3,045,820	24	12	365	Water Supply - Municipal
		04-P-4031	2/25/2004	2/24/2014	1,800	1,300,000	12	10	30	Agricultural - Field and Pasture Crops
		1128-629QDC	7/6/2004	7/6/2014	34,771	671,250	24	0	365	Miscellaneous - Wildlife Conservation
		1128-629QDC	7/6/2004	7/6/2014	28,744	554,900	24	0	365	Miscellaneous - Wildlife Conservation
		04-P-4031	2/25/2004	2/24/2014	360	518,400	24	24	75	Agricultural - Field and Pasture Crops
		1128-629QDC	7/6/2004	7/6/2014	17,895	345,470	24	0	365	Miscellaneous - Wildlife Conservation
		1128-629QDC	7/6/2004	7/6/2014	11,034	213,010	24	0	365	Miscellaneous - Wildlife Conservation
		7125-629PM5	7/6/2004	7/6/2014	10,663	205,850	24	0	365	Miscellaneous - Wildlife Conservation
		7125-629PM5	7/6/2004	7/6/2014	7,881	152,150	24	0	365	Miscellaneous - Wildlife Conservation

Subwatershed	Catchment	Permit to Take Water No.	Issue Date	Expiry Date	Maximum Permitted Water Takings					Purpose of Permit
					Litres per Minute	Max Litres per Day	Max Hours per Day	Average Hours per Day	Days per Year	
		88-P-4071	9/28/1988	4/1/2009	0	136,380	0	0	365	Dewatering - Pits and Quarries
		1128-629QDC	7/6/2004	7/6/2014	6,583	127,090	24	0	365	Miscellaneous - Wildlife Conservation
		7125-629PM5	7/6/2004	7/6/2014	5,526	106,684	24	0	365	Miscellaneous - Wildlife Conservation
		7125-629PM5	7/6/2004	7/6/2014	5,304	102,388	24	0	365	Miscellaneous - Wildlife Conservation
		7125-629PM5	7/6/2004	7/6/2014	4,135	79,834	24	0	365	Miscellaneous - Wildlife Conservation
		88-P-4071	9/28/1988	4/1/2009	182	22,730	12	8	280	Dewatering - Pits and Quarries
		1128-629QDC	7/6/2004	7/6/2014	593	11,456	24	0	365	Miscellaneous - Wildlife Conservation
Rice Lake	OUSE-1	97-P-4035	5/8/1997		0	50,500,000	0	6,000	0	Miscellaneous - Wildlife Conservation
		01-P-4068	12/3/2001	12/2/2011	0	9,807,120	24	24	365	Miscellaneous - Wildlife Conservation
		2626-627Q45	7/6/2004	7/6/2014	199,167	3,844,920	24	0	365	Miscellaneous - Wildlife Conservation
		2626-627Q45	7/6/2004	7/6/2014	188,993	3,844,080	24	0	365	Miscellaneous - Wildlife Conservation
		02-P-4073	12/11/2002	12/11/2012	2,200	3,168,000	24	24	365	Commercial - Aquaculture
		02-P-4073	12/11/2002	12/11/2012	1,700	2,448,000	24	24	365	Commercial - Aquaculture
		02-P-4073	12/11/2002	12/11/2012	1,700	2,448,000	24	24	365	Commercial - Aquaculture
		98-P-4055	6/15/1998	1/8/2014	988	1,300,000	24	0	365	Miscellaneous - Wildlife Conservation
		02-P-4073	12/11/2002	12/11/2012	600	864,000	24	24	365	Commercial - Aquaculture
		2626-627Q45	7/6/2004	7/6/2014	26,518	511,940	24	0	365	Miscellaneous - Wildlife Conservation
		2626-627Q45	7/6/2004	7/6/2014	14,094	272,080	24	0	365	Miscellaneous - Wildlife Conservation
		2626-627Q45	7/6/2004	7/6/2014	12,610	243,440	24	0	365	Miscellaneous - Wildlife Conservation
		00-P-4126	10/11/2000	10/10/2010	909	109,104	2	1	365	Commercial - Other - Commercial
		97-P-4067	6/18/1997		5,100	0	0	0	0	Miscellaneous - Wildlife Conservation
		97-P-4050	2/6/1984		3,000	0	24	24	365	Miscellaneous - Wildlife Conservation
	OUSE-2	00-P-4044	5/5/2000	5/1/2010	2,728	981,936	6	3	210	Commercial - Golf Course Irrigation
		0286-62AL8F	7/8/2004	7/8/2014	24,924	481,152	24	0	365	Miscellaneous - Wildlife Conservation
		0286-62AL8F	7/8/2004	7/8/2014	21,586	416,712	24	0	365	Miscellaneous - Wildlife Conservation
		0286-62AL8F	7/8/2004	7/8/2014	8,994	173,630	24	0	365	Miscellaneous - Wildlife Conservation
		0286-62AL8F	7/8/2004	7/8/2014	7,603	146,780	24	0	365	Miscellaneous - Wildlife Conservation
		97-P-4059	6/16/1997		10,194	0	24	24	365	Miscellaneous - Wildlife Conservation
		97-P-4044	6/18/1997		10,194	0	24	24	365	Miscellaneous - Wildlife Conservation
	OUSE-3	00-P-4010	1/10/2000	1/10/2010	144,780	74,016,000	24	24	365	Miscellaneous - Wildlife Conservation
	RICE-1	86-P-3037	9/12/1986		6,000	203,544,000	0	0	365	Miscellaneous - Wildlife Conservation
		86-P-3038	9/30/1986		6,000	30,840,000	0	0	365	Miscellaneous - Wildlife Conservation
		02-P-4052	9/24/2002	9/25/2012	4,920	7,084,800	24	24	365	Recreational - Wetlands
		02-P-4052	9/24/2002	9/25/2012	3,900	5,616,000	24	24	365	Recreational - Wetlands
		02-P-4052	9/24/2002	9/25/2012	2,760	3,974,400	24	24	365	Recreational - Wetlands
		02-P-4052	9/24/2002	9/25/2012	2,580	3,715,200	24	24	365	Recreational - Wetlands
		02-P-4052	9/24/2002	9/25/2012	2,280	3,283,200	24	24	365	Recreational - Wetlands
		6842-5ZEL9H	6/18/2004	6/18/2014	11,498	221,960	24	0	365	Miscellaneous - Wildlife Conservation
		00-P-4130	10/11/2000	10/10/2010	909	109,104	2	1	240	Commercial - Other - Commercial
		04-P-4032	3/1/2004	8/31/2008	148	89,000	10	0	153	Commercial - Other - Commercial
		02-P-4052	9/24/2002	9/25/2012	4,620	4,620	24	24	365	Recreational - Wetlands
		97-P-4045	7/15/1997		3,000	0	0	0	365	Miscellaneous - Wildlife Conservation

Subwatershed	Catchment	Permit to Take Water No.	Issue Date	Expiry Date	Maximum Permitted Water Takings					Purpose of Permit
					Litres per Minute	Max Litres per Day	Max Hours per Day	Average Hours per Day	Days per Year	
		97-P-4065	6/18/1997		3,409	0	0	0	0	Miscellaneous - Wildlife Conservation
		97-P-4052	10/29/1984		2,974	0	24	24	365	Miscellaneous - Wildlife Conservation
Bay of Quinte Drainage Area - East	BOQ-2	8287-5ZDQM3	6/9/2004	6/7/2014	50,444	72,640,000	24	24	365	Water Supply - Municipal

SUMMARY OF PERMITS TO TAKE WATER BY SUBWATERSHED (GROUNDWATER)

Subwatershed	Catchment	Permit to Take Water No.	Issue Date	Expiry Date	Maxmimum Permitted Water Takings					Purpose of Permit
					Litres per Minute	Max Litres per Day	Max Hours per Day	Average Hours per Day	Days per Year	
Bamum House Creek	SVC-3	95-P-4015	8/23/1996		870	1,252,800	24	8	183	Water Supply - Other - Water Supply
		95-P-4015	8/23/1996		870	1,252,800	24	8	182	Water Supply - Other - Water Supply
		2422-5ZSL6Y	6/11/2004		186	267,600	24	0	365	Commercial - Bottled Water
		2422-5ZSL6Y	6/11/2004		119	171,100	24	0	365	Commercial - Bottled Water
		2422-5ZSL6Y	6/11/2004		107	154,600	24	0	365	Commercial - Bottled Water
		2422-5ZSL6Y	6/11/2004		53	76,800	24	0	365	Commercial - Bottled Water
		2422-5ZSL6Y	6/11/2004		53	75,900	24	0	365	Commercial - Bottled Water
Bay of Quinte Drainage Area (East)	BOQ-2	2343-63DNEK	8/4/2004	7/30/2014	90	129,600	24	0	365	Water Supply - Municipal
		2343-63DNEK	8/4/2004	7/30/2014	45	64,800	24	0	365	Water Supply - Municipal
Burnt River	BURNT-2	93-P-3074	5/26/1994	3/31/2006	1,370	1,971,086	16	8	100	Miscellaneous - Other - Miscellaneous
		99-P-4015	7/21/1999	2/28/2014	270	388,800	24	24	365	Commercial - Aquaculture
		93-P-3074	5/26/1994	3/31/2006	270	315,900	24	16	365	Miscellaneous - Other - Miscellaneous
		99-P-4015	7/21/1999	2/28/2014	200	288,000	24	24	365	Commercial - Aquaculture
		03-P-4100	11/4/2003	11/4/2013	69	99,360	24	4	365	Water Supply - Municipal
		03-P-4046	5/7/2003	5/7/2013	61	48,000	24	8	365	Water Supply - Campgrounds
		03-P-4046	5/7/2003	5/7/2013	61	48,000	24	8	365	Water Supply - Campgrounds
		03-P-4046	5/7/2003	5/7/2013	61	48,000	24	8	365	Water Supply - Campgrounds
		03-P-4046	5/7/2003	5/7/2013	61	48,000	24	8	365	Water Supply - Campgrounds
	BURNT-4	03-P-4008	1/13/2003	1/13/2013	137	196,620	24	15	365	Water Supply - Municipal
		7530-65WNWG	10/26/2004	10/31/2014	85,000	115	24	0	365	Water Supply - Communal
Crowe River	CROWE-1	4882-64DLZL	10/12/2004	10/12/2014	3,000	4,320,000	24	0	365	Dewatering - Pits and Quarries
		4882-64DLZL	10/12/2004	10/12/2014	4,500	3,780,000	24	0	180	Dewatering - Pits and Quarries
	CROWE-3	92-P-3111	11/12/1992	6/24/2012	455	654,624	24	15	365	Water Supply - Municipal
		03-P-4030	2/28/2003	2/28/2013	38	54,510	24	18	200	Water Supply - Campgrounds
		03-P-4030	2/28/2003	2/28/2013	38	54,510	24	18	200	Water Supply - Campgrounds
		03-P-4030	2/28/2003	2/28/2013	38	7,000	3	2	165	Water Supply - Campgrounds
		03-P-4030	2/28/2003	2/28/2013	38	7,000	3	2	165	Water Supply - Campgrounds
	CROWE-4	95-P-4067	1/15/1996		2,728	3,927,744	24	12	365	Dewatering - Pits and Quarries
		0860-64TSAR	10/12/2004	10/12/2014	912	1,313,280	24	0	365	Water Supply - Municipal
		0860-64TSAR	10/12/2004	10/12/2014	486	699,840	24	0	365	Water Supply - Municipal
		0860-64TSAR	10/12/2004	10/12/2014	486	699,840	24	0	365	Water Supply - Municipal
		2183-65HPNL	10/14/2004	10/14/2014	284	408,960	24	0	365	Water Supply - Communal
		2183-65HPNL	10/14/2004	10/14/2014	169	243,360	24	0	365	Water Supply - Communal
Gull River	GULL-5	93-P-3039	6/28/1993	3/31/2013	1,368	1,970,000	24	20	365	Water Supply - Municipal
		93-P-3039	6/28/1993	3/31/2013	456	657,000	24	24	365	Water Supply - Municipal
		81-P-3014	7/2/1981	11/7/2011	340	454,600	22	22	365	Water Supply - Municipal
		81-P-3014	7/2/1981	11/7/2011	340	454,600	22	22	365	Water Supply - Municipal
Kawartha Lake East	KLE-4	93-P-3027	5/27/1993	3/9/2014	5,455	4,582,368	24	14	306	Dewatering - Pits and Quarries
KLW_Northern & Central	KLW-N1	93-P-3027	5/27/1993	3/9/2014	3,637	5,236,992	24	14	365	Dewatering - Pits and Quarries
		02-P-4002	2/24/2003	1/11/2012	318	457,630	24	8	365	Water Supply - Municipal
		02-P-4002	2/24/2003	1/11/2012	318	457,630	24	8	365	Water Supply - Municipal
	KLW-N2	04-P-4017	2/9/2004	2/8/2014	36	51,840	24	0	365	Water Supply - Communal
		04-P-4017	2/9/2004	2/8/2014	23	33,120	24	0	365	Water Supply - Communal

Subwatershed	Catchment	Permit to Take Water No.	Issue Date	Expiry Date	Maxmimum Permitted Water Takings					Purpose of Permit
					Litres per Minute	Max Litres per Day	Max Hours per Day	Average Hours per Day	Days per Year	
	KLW-N4	00-P-4110	7/25/2000	7/31/2010	1,514	2,180,160	24	15	200	Commercial - Golf Course Irrigation
		00-P-4110	7/25/2000	7/31/2010	3,785	1,362,600	7	6	200	Commercial - Golf Course Irrigation
		02-P-4021	2/25/2002	2/25/2012	227	327,312	24	24	365	Water Supply - Municipal
		04-P-4029	2/19/2004	2/18/2014	135	194,400	24	24	365	Water Supply - Municipal
		04-P-4019	2/10/2004	2/9/2014	109	157,110	24	0	365	Water Supply - Municipal
		00-P-4108	7/25/2000	7/31/2010	82	117,832	24	12	365	Water Supply - Communal
		02-P-4022	2/25/2002	6/26/2013	276	95,000	24	24	365	Water Supply - Municipal
		04-P-4019	2/10/2004	2/9/2014	50	72,009	24	0	100	Water Supply - Municipal
		92-P-3094	10/7/1992	3/12/2013	37	52,370	24	24	365	Remediation - Groundwater
		92-P-3094	10/7/1992	3/12/2013	18	26,185	24	24	365	Remediation - Groundwater
		00-P-4110	7/25/2000	7/31/2010	15	9,462	11	8	365	Commercial - Golf Course Irrigation
	KLW-N6	02-P-4001	1/10/2002	2/24/2013	273	393,000	24	8	365	Water Supply - Municipal
		98-P-4068	7/12/1998	8/11/2013	230	331,200	24	0	365	Water Supply - Municipal
		98-P-4068	7/12/1998	8/11/2013	140	201,600	24	0	365	Water Supply - Municipal
		04-P-4018	2/9/2004	2/8/2014	136	196,387	24	0	365	Water Supply - Communal
		04-P-4018	2/9/2004	2/8/2014	114	163,656	24	0	365	Water Supply - Communal
		4017-5ZRNZH	7/15/2004	12/31/2009	180	150,000	24	0	365	Water Supply - Municipal
		97-P-4116	9/23/1997		909	136,380	10	1	365	Water Supply - Other - Water Supply
		98-P-4068	7/12/1998	8/11/2013	30	129,600	24	0	365	Water Supply - Municipal
		98-P-4068	7/12/1998	8/11/2013	70	100,800	24	0	365	Water Supply - Municipal
		98-P-4068	7/12/1998	8/11/2013	70	100,800	24	0	365	Water Supply - Municipal
		99-P-4032	11/5/1999	11/6/2009	180	100,000	24	8	365	Water Supply - Municipal
		99-P-4010	6/10/1999	6/15/2009	22	31,680	24	0	365	Miscellaneous - Other - Miscellaneous
		99-P-4010	6/10/1999	6/15/2009	14	20,160	24	0	365	Miscellaneous - Other - Miscellaneous
		99-P-4010	6/10/1999	6/15/2009	14	20,160	24	0	365	Miscellaneous - Other - Miscellaneous
KLW_Southern portion	KLW-S1	02-P-4020	2/19/2002	2/19/2012	1,591	525,063	6	4	184	Commercial - Golf Course Irrigation
		01-P-3017	11/5/2001	11/5/2006	682	501,120	24	8	365	Water Supply - Municipal
		01-P-3017	11/5/2001	11/5/2006	682	501,120	24	8	365	Water Supply - Municipal
		01-P-3017	11/5/2001	11/5/2006	216	311,040	24	8	365	Water Supply - Municipal
		01-P-3017	11/5/2001	11/5/2006	132	190,080	24	8	365	Water Supply - Municipal
		96-P-4079	7/17/1996	6/15/2009	118	170,000	24	8	365	Water Supply - Municipal
		87-P-3045	9/9/1987	6/15/2008	114	163,620	24	0	365	Water Supply - Municipal
		2080-68TR3P	3/16/2005	3/31/2015	90	129,600	24	0	365	Water Supply - Municipal
		2080-68TR3P	3/16/2005	3/31/2015	90	129,600	24	0	365	Water Supply - Municipal
		99-P-4025	8/23/1999	8/30/2009	100	114,830	24	12	365	Water Supply - Communal
		96-P-4079	7/17/1996	6/15/2009	78	112,320	24	2	90	Water Supply - Municipal
		99-P-4025	8/23/1999	8/30/2009	86	98,750	24	12	365	Water Supply - Communal
		2080-68TR3P	3/16/2005	3/31/2015	68	97,920	24	0	365	Water Supply - Municipal
		2080-68TR3P	3/16/2005	3/31/2015	68	97,920	24	0	365	Water Supply - Municipal
		2080-68TR3P	3/16/2005	3/31/2015	68	97,920	24	0	365	Water Supply - Municipal
		99-P-4025	8/23/1999	8/30/2009	77	88,420	24	12	365	Water Supply - Communal
		7005-65HNJR	10/13/2004	10/31/2014	50	72,000	24	0	365	Water Supply - Municipal
		7005-65HNJR	10/13/2004	10/31/2014	46	65,664	24	0	365	Water Supply - Municipal
		02-P-3039	2/17/2003	12/31/2012	46	65,412	24	0	365	Water Supply - Other - Water Supply
		2080-68TR3P	3/16/2005	3/31/2015	36	51,840	24	0	365	Water Supply - Municipal
		02-P-3039	2/17/2003	12/31/2012	19	27,255	24	0	365	Water Supply - Other - Water Supply
		02-P-4020	2/19/2002	2/19/2012	18	15,275	14	10	184	Commercial - Golf Course Irrigation
	KLW-S2	97-P-4080	7/15/1988		1,251	1,800,216	24	16	200	Industrial - Aggregate Washing
		97-P-4080	7/15/1988		181	261,850	24	8	40	Industrial - Aggregate Washing

Subwatershed	Catchment	Permit to Take Water No.	Issue Date	Expiry Date	Maxmimum Permitted Water Takings					Purpose of Permit
					Litres per Minute	Max Litres per Day	Max Hours per Day	Average Hours per Day	Days per Year	
		92-P-3089	9/30/1992	1/6/2013	180	259,200	24	0	365	Water Supply - Municipal
		92-P-3089	9/30/1992	1/6/2013	140	201,600	24	0	365	Water Supply - Municipal
		97-P-4080	7/15/1988		160	115,200	24	8	365	Industrial - Aggregate Washing
		92-P-3089	9/30/1992	1/6/2013	66	95,040	24	0	365	Water Supply - Municipal
	KLW-S3	03-P-4920	7/18/2003		10,228	7,364,160	0	0	0	Miscellaneous - Pumping Test
		0838-5ZSRNH	6/17/2004	6/30/2014	3,000	2,160,000	12	0	258	Industrial - Aggregate Washing
		2077-64VPQG	9/21/2004	9/14/2014	1,136	1,636,000	24	0	365	Water Supply - Municipal
		6212-64VQSJ	9/21/2004	9/21/2014	209	300,960	24	0	365	Water Supply - Municipal
		98-P-4029	2/26/2003	2/26/2013	182	262,080	24	18	365	Water Supply - Municipal
		98-P-4029	2/26/2003	2/26/2013	138	198,720	24	18	365	Water Supply - Municipal
		2077-64VPQG	9/21/2004	9/14/2014	91	130,900	24	0	365	Water Supply - Municipal
		04-P-4015	2/6/2004	2/6/2014	107	75,000	24	0	365	Water Supply - Municipal
		04-P-4015	2/6/2004	2/6/2014	107	75,000	24	0	365	Water Supply - Municipal
Lake Ontario - Proctor Calibration	LAKE ONTARIO-3	2001-62MNU2	9/27/2004	9/27/2014	1,494	2,151,360	24	0	365	Water Supply - Municipal
		2001-62MNU2	9/27/2004	9/27/2014	1,494	2,151,360	24	0	365	Water Supply - Municipal
		2001-62MNU2	9/27/2004	9/27/2014	1,494	2,151,360	24	0	365	Water Supply - Municipal
		03-P-4074	9/12/2003	9/12/2013	955	675,990	6	3	184	Commercial - Golf Course Irrigation
		03-P-4074	9/12/2003	9/12/2013	59	22,730	6	3	365	Commercial - Golf Course Irrigation
		03-P-4074	9/12/2003	9/12/2013	59	22,730	6	3	365	Commercial - Golf Course Irrigation
Lower Trent River	LT-1	97-P-4084	6/13/1997		0	75,000	0	0	365	Commercial - Other - Commercial
		97-P-4084	6/13/1997		0	25,000	0	0	365	Commercial - Other - Commercial
	LT-2	97-P-4029	8/12/1997		355	318,220	24	24	365	Water Supply - Other - Water Supply
		97-P-4029	8/12/1997		355	318,220	24	24	365	Water Supply - Other - Water Supply
		89-P-4062	7/20/1989	10/31/2006	90	129,600	24	24	365	Miscellaneous - Other - Miscellaneous
		89-P-4062	7/20/1989	10/31/2006	90	129,600	24	24	365	Miscellaneous - Other - Miscellaneous
		89-P-4062	7/20/1989	10/31/2006	65	93,600	24	24	365	Miscellaneous - Other - Miscellaneous
		89-P-4062	7/20/1989	10/31/2006	45	64,800	24	24	365	Miscellaneous - Other - Miscellaneous
		89-P-4062	7/20/1989	10/31/2006	39	55,584	24	24	365	Miscellaneous - Other - Miscellaneous
		89-P-4062	7/20/1989	10/31/2006	9	13,104	24	24	365	Miscellaneous - Other - Miscellaneous
		89-P-4062	7/20/1989	10/31/2006	6	8,496	24	24	365	Miscellaneous - Other - Miscellaneous
		89-P-4062	7/20/1989	10/31/2006	1	1,152	24	24	365	Miscellaneous - Other - Miscellaneous
	LT-4	94-P-4002	1/14/1994	3/8/2012	1,350	1,944,000	24	0	365	Water Supply - Municipal
		96-P-4110	10/15/1996	12/15/2008	909	1,309,248	24	10	365	Commercial - Bottled Water
		94-P-4002	1/14/1994	3/8/2012	906	1,304,640	24	0	365	Water Supply - Municipal
		94-P-4002	1/14/1994	3/8/2012	906	1,304,640	24	0	365	Water Supply - Municipal
		94-P-4002	1/14/1994	3/8/2012	450	648,000	24	0	365	Water Supply - Municipal
Rice Lake	OUSE-1	01-P-4007	3/30/2001	3/29/2011	52	74,880	24	20	365	Water Supply - Municipal
		01-P-4007	3/30/2001	3/29/2011	39	56,160	24	20	365	Water Supply - Municipal
	OUSE-2	93-P-3023	4/28/2003	4/28/2013	455	655,000	24	0	365	Water Supply - Municipal
		93-P-3023	4/28/2003	4/28/2013	455	655,000	24	0	365	Water Supply - Municipal
		93-P-3023	4/28/2003	4/28/2013	455	655,000	24	0	365	Water Supply - Municipal
	RICE-1	04-P-4042	4/2/2004	4/2/2014	1,500	3,000,000	24	12	365	Water Supply - Municipal
		04-P-4042	4/2/2004	4/2/2014	1,500	3,000,000	24	12	365	Water Supply - Municipal
		04-P-4042	4/2/2004	4/2/2014	1,500	3,000,000	24	12	365	Water Supply - Municipal
		01-P-4087	12/31/2001	12/31/2011	1,060	1,526,400	24	12	365	Water Supply - Communal
		01-P-4087	12/31/2001	12/31/2011	1,060	1,526,400	24	12	365	Water Supply - Communal
		92-P-3092	10/7/1992	3/10/2006	2,271	1,362,600	10	8	120	Commercial - Golf Course Irrigation
		92-P-3092	10/7/1992	3/10/2006	947	738,075	13	10	120	Commercial - Golf Course Irrigation
		92-P-3092	10/7/1992	3/10/2006	757	590,460	13	10	120	Commercial - Golf Course Irrigation

Subwatershed	Catchment	Permit to Take Water No.	Issue Date	Expiry Date	Maxmimum Permitted Water Takings					Purpose of Permit
					Litres per Minute	Max Litres per Day	Max Hours per Day	Average Hours per Day	Days per Year	
		2011-64TQ29	9/21/2004	9/21/2014	408	587,520	24	0	365	Water Supply - Municipal
		4162-65JLL8	10/13/2004	10/13/2014	800	432,000	9	0	365	Commercial - Golf Course Irrigation
		99-P-4031	11/8/1999	10/1/2012	350	360,000	17	3	365	Water Supply - Municipal
		99-P-4031	11/8/1999	10/1/2012	250	360,000	24	6	365	Water Supply - Municipal
		2011-64TQ29	9/21/2004	9/21/2014	182	261,504	24	0	365	Water Supply - Municipal
		02-P-4018	2/19/2002	2/19/2012	800	260,000	24	24	200	Industrial - Cooling Water
		4162-65JLL8	10/13/2004	10/13/2014	400	216,000	9	0	153	Commercial - Golf Course Irrigation
		2011-64TQ29	9/21/2004	9/21/2014	114	163,440	24	0	365	Water Supply - Municipal
		0532-64PJRF	9/13/2004	9/14/2014	32	46,080	24	0	365	Water Supply - Municipal
		0532-64PJRF	9/13/2004	9/14/2014	32	46,080	24	0	365	Water Supply - Municipal
		0532-64PJRF	9/13/2004	9/14/2014	32	46,080	24	0	365	Water Supply - Municipal
		0532-64PJRF	9/13/2004	9/14/2014	32	46,080	24	0	365	Water Supply - Municipal
		99-P-4009	6/9/1999	6/15/2009	130	37,500	0	0	250	Industrial - Cooling Water
		99-P-4009	6/9/1999	6/15/2009	270	37,500	0	0	250	Industrial - Cooling Water
		99-P-4009	6/9/1999	6/15/2009	270	37,500	0	0	250	Industrial - Cooling Water
		99-P-4009	6/9/1999	6/15/2009	270	37,500	0	0	250	Industrial - Cooling Water
		4162-65JLL8	10/13/2004	10/13/2014	30	8,000	15	0	365	Commercial - Golf Course Irrigation
		04-P-4045	4/21/2004	4/21/2009	20	28,800	24	0	365	Remediation - Dewatering
		04-P-4045	4/21/2004	4/21/2009	30	43,200	24	0	365	Remediation - Dewatering
		04-P-4045	4/21/2004	4/21/2009	30	43,200	24	0	365	Remediation - Dewatering
		04-P-4045	4/21/2004	4/21/2009	50	72,000	24	0	365	Remediation - Dewatering
		04-P-4045	4/21/2004	4/21/2009	20	28,800	24	0	365	Remediation - Dewatering
		04-P-4045	4/21/2004	4/21/2009	20	28,800	24	0	365	Remediation - Dewatering

SUMMARY OF WATER TAKINGS BY CATCHMENT

Catchment	Current Takings (m^3)								Future Takings (m^3)							
	Surface Water				Groundwater				Surface Water				Groundwater			
	Permitted	Agriculture	Domestic	Total	Permitted	Agriculture	Domestic	Total	Permitted	Agriculture	Domestic	Total	Permitted	Agriculture	Domestic	Total
GULL-1	0	288	12	300	0	288	12	300	0	345	12	357	0	345	12	357
GULL-2	5,710	297	36	6,043	0	297	36	333	6,853	360	36	7,249	0	360	36	396
GULL-3	0	84	12	96	0	84	12	96	0	96	12	108	0	96	12	108
GULL-4	0	930	12	942	0	930	12	942	0	1128	24	1152	0	1128	24	1152
GULL-5	1,357,172	11,700	48	1,368,920	372,792	11,700	48	384,540	1,628,607	14,040	56	1,642,703	447,350	14,040	56	461,446
BURNT-1	14,752	6,660	22	21,434	0	6,660	22	6,682	17,702	7,992	26	25,720	0	7,992	26	8,018
BURNT-2	962,127	1,764	99	963,990	358,385	1,764	99	360,248	1,154,552	2,116	118	1,156,786	430,061	2,116	118	432,295
BURNT-3	0	12,998	45	13,043	0	12,998	45	13,043	0	15,597	54	15,651	0	15,597	54	15,651
BURNT-4	797,125	3,557	67	800,749	28,954	3,557	67	32,578	956,550	4269	80	960,899	34,745	4,269	80	39,094
BURNT-5	0	1,167	3	1,170	0	1,167	3	1,170	0	1,400	4	1,404	0	1,400	4	1,404
KLW-N1	13,747	12,725	130	26,602	527,185	12,725	130	540,040	16,497	15,270	155	31,922	632,623	15,270	155	648,048
KLW-N2	162,779	85,188	279	248,246	55,297	85,188	279	140,764	195,335	102,226	336	297,897	66,356	102,226	336	168,918
KLW-N3	170,149	26,024	106	196,279	0	26,024	106	26,130	204,179	31,229	127	235,535	0	31,229	127	31,356
KLW-N4	670,459	78,390	322	749,171	560,335	78,390	322	639,048	804,550	94,068	387	899,005	672,403	94,068	387	766,858
KLW-N5	4,920	36,577	17	41,514	0	36,577	17	36,594	5,904	43,892	20	49,816	0	43,892	20	43,912
KLW-S1	488,764	0	0	488,764	2,168,983	580,113	961	2,750,057	586,517	0	0	586,517	2,602,779	696,136	1,360	3,300,275
KLW-S2	80,723	0	0	80,723	110,875	131,899	163	242,936	96,867	0	0	96,867	133,050	158,278	216	291,544
KLW-S3	70,262	0	0	70,262	1,614,191	103,330	293	1,717,814	84,314	0	0	84,314	1,937,029	123,996	353	2,061,377
KLE-1	158,313	8,921	20	167,254	0	8,921	20	8,942	189,976	10,706	24	200,706	0	10,706	24	10,730
KLE-2	0	909	35	944	0	909	35	944	0	1,091	41	1,132	0	1,091	41	1,132
KLE-3	0	37,567	431	37,998	12,045	37,567	431	50,043	0	45,081	514	45,595	14,454	45,081	514	60,049
KLE-4	33,169	24,825	80	58,074	350,551	24,825	80	375,456	39,803	29,790	95	69,688	420,661	29,790	95	450,546
KLE-5	26,185	2,743	7	28,935	176,136	2,743	7	178,886	31,422	3,291	8	34,721	211,363	3,291	8	214,662
RICE-1	769,277	0	0	769,277	1,184,916	449,714	607	1,635,237	923,132	0	0	923,132	1,421,899	539,656	724	1,962,279
OUSE-1	365,695	105,749	178	471,622	27,977	105,749	178	133,904	438,834	126,899	216	565,948	33,572	126,899	216	160,687
OUSE-2	332,866	93,666	109	426,641	413,208	93,666	109	506,983	399,439	112,400	130	511,969	495,850	112,400	130	608,380
OUSE-3	90,920	39,793	98	130,811	0	39,793	98	39,891	109,104	47,752	120	156,976	0	47,752	120	47,872
CROWE-1	366,394	18,894	51	385,339	738,372	18,894	51	757,317	439,673	22,673	60	462,406	886,047	22,673	60	908,780
CROWE-2	0	3,755	256	4,011	0	3,755	256	4,011	0	4,506	300	4,806	0	4,506	300	4,806
CROWE-3	590,570	24,770	96	615,436	32,452	24,770	96	57,318	708,684	29,725	113	738,522	38,943	29,725	113	68,781
CROWE-4	9,092	5,042	50	14,184	601,942	5,042	50	607,034	10,910	6,051	59	17,020	722,331	6,051	59	728,441
CROWE-5	22,730	1,611	3	24,344	0	1,611	3	1,614	27,276	1,934	3	29,213	0	1,934	3	1,937
LT-1	48,071	0	0	48,071	317,374	323,524	342	641,240	57,685	0	0	57,685	380,849	388,229	427	769,505
LT-2	147,192	0	0	147,192	227,477	59,620	315	287,412	176,631	0	0	176,631	272,972	71,544	374	344,890
LT-3	77,821	0	0	77,821	15,229	339,831	478	355,538	93,386	0	0	93,386	18,275	407,797	586	426,658
LT-4	78,630	0	0	78,630	1,226,474	373,585	557	1,600,616	94,357	0	0	94,357	1,471,769	448,302	671	1,920,742
SVC-1	0	0	0	0	0	9,849	14	9,863	0	0	0	0	0	11,819	17	11,836
SVC-2	0	0	0	0	0	51,823	77	51,900	0	0	0	0	0	62,188	97	62,285
SVC-3	0	0	0	0	176,996	42,719	0	219,715	0	0	0	0	212,395	51,263	0	263,658
Lake Ont 1	0	0	0	0	1,087,520	78,098	88	1,165,706	0	0	0	0	1,305,024	93,717	110	1,398,851
Lake Ont 2	0	0	0	0	112,159	58,870	221	171,250	0	0	0	0	134,591	70,645	276	205,512
Lake Ont 3	548,601	0	0	548,601	1,838,724	96,508	126	1,935,358	658,321	0	0	658,321	2,206,468	115,809	157	2,322,434
BOQ-1	331,858	0	0	331,858	16,500	19,164	477	36,141	398,230	0	0	398,230	19,800	22,998	571	43,369
BOQ-2	6,135,114	0	0	6,135,114	20,259	50,684	746	71,689	7,362,137	0	0	7,362,137	24,311	60,821	877	86,009

APPENDIX D

ACTIVITIES THAT CONTRIBUTE TO DRINKING WATER ISSUES

ACTIVITIES THAT CONTRIBUTE TO DRINKING WATER ISSUES

- Activities prescribed to be drinking water threats that are potential sources of E.Coli
  - WHPA-A and WHPA-B
  - WHPA-E

Activities prescribed to be drinking water threats that are potential sources of E.Coli (WHPA-A and WHPA-B)

Prescribed Drinking Water Threat	Threat Subcategory	Pathogen Circumstance	Ref #
The application of agricultural source material to land.	Application Of Agricultural Source Material (ASM) To Land	1. Agricultural source material is applied to land in any quantity. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	1
The application of agricultural source material to land.	Application Of Agricultural Source Material (ASM) To Land	1. Agricultural source material is applied to land in any quantity. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	1
The application of agricultural source material to land.	Application Of Agricultural Source Material (ASM) To Land	1. Agricultural source material is applied to land in any quantity. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	1
The application of agricultural source material to land.	Application Of Agricultural Source Material (ASM) To Land	1. Agricultural source material is applied to land in any quantity. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	1
The application of agricultural source material to land.	Application Of Agricultural Source Material (ASM) To Land	1. Agricultural source material is applied to land in any quantity. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	1
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as livestock grazing or pasturing land for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	2
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as livestock grazing or pasturing land for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	2
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as livestock grazing or pasturing land for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	2
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as livestock grazing or pasturing land for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	2
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as an outdoor confinement area or a farm-animal yard for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	3
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as an outdoor confinement area or a farm-animal yard for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	3
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as an outdoor confinement area or a farm-animal yard for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	3

Prescribed Drinking Water Threat	Threat Subcategory	Pathogen Circumstance	Ref #
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as an outdoor confinement area or a farm-animal yard for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	3
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as an outdoor confinement area or a farm-animal yard for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	3
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Discharge Of Untreated Stormwater From A Stormwater Retention Pond	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The discharge may result in the presence of one or more pathogens in groundwater or surface water.	6
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Septic System	1. The system is an earth pit privy, privy vault, cesspool, or a leaching bed system and its associated treatment unit and is a sewage system as defined in section 1 of O. Reg. 350/06 (Building Code) made under the Building Code Act, 1992 or a sewage works as defined in section 1 of the Ontario Water Resources Act. 2. A discharge from the system may result in the presence of one or more pathogens in groundwater or surface water.	13
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Septic System Holding Tank	1. The system requires or uses a holding tank for the retention of hauled sewage at the site where it is produced before its collection by a hauled sewage system. 2. A spill from the tank may result in the presence of one or more pathogens in groundwater or surface water.	14
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Sanitary Sewers and related pipes	1. The system is a wastewater collection facility that collects or transmits sewage containing human waste, but does not include any part of the facility that is a sewage storage tank or works used to carry out a designed bypass. 2. The discharge from the system may result in the presence of one or more pathogens in groundwater or surface water.	15
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Sewage Treatment Plant Effluent Discharges (Includes Lagoons)	1. The system is a wastewater treatment facility that discharges to surface water through a means other than a designed bypass. 2. A discharge may result in the presence of one or more pathogens in groundwater or surface water.	16
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Storage Of Sewage (E.G. Treatment Plant Tanks)	1. The system is a sewage treatment tank or sewage storage tank in either a wastewater collection facility or wastewater treatment facility, and any part of the tank is at or above grade. 2. A spill from the tank may result in the presence of one or more pathogens in groundwater or surface water.	17
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Storage Of Sewage (E.G. Treatment Plant Tanks)	1. The system is a sewage treatment tank or sewage storage tank in a wastewater collection facility or a wastewater treatment facility and the tank is below grade. 2. A spill from the tank may result in the presence of one or more pathogens in groundwater or surface water.	18
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. Any portion of the agricultural source material is stored at or above grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	19
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. Any portion of the agricultural source material is stored at or above grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	19

Prescribed Drinking Water Threat	Threat Subcategory	Pathogen Circumstance	Ref #
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. Any portion of the agricultural source material is stored at or above grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	19
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. Any portion of the agricultural source material is stored at or above grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	19
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. Any portion of the agricultural source material is stored at or above grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	19
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. Any portion of the agricultural source material is stored at or above grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	19
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. Any portion of the agricultural source material is stored at or above grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	19
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored entirely below grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	20
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored entirely below grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	20
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored entirely below grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	20
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored entirely below grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	20
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored entirely below grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	20
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored entirely below grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	20

Prescribed Drinking Water Threat	Threat Subcategory	Pathogen Circumstance	Ref #
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored entirely below grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	20
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored at a temporary field nutrient storage site. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	21
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored at a temporary field nutrient storage site. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	21
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored at a temporary field nutrient storage site. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	21
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored at a temporary field nutrient storage site. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	21
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored at a temporary field nutrient storage site. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	21
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored at a temporary field nutrient storage site. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	21
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill, and any portion of the material is stored at or above grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	22
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill, and any portion of the material is stored at or above grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	22
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill, and any portion of the material is stored at or above grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	22

Prescribed Drinking Water Threat	Threat Subcategory	Pathogen Circumstance	Ref #
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill, and any portion of the material is stored at or above grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	22
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a meat plant, and any portion of the material is stored at or above grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	23
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill, and the material is stored entirely below grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	24
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill, and the material is stored entirely below grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	24
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill, and the material is stored entirely below grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	24
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill, and the material is stored entirely below grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	24
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a meat plant, and the material is stored entirely below grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	25
The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Application Of Untreated Septage To Land	1. Land application of hauled sewage in any quantity. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	26
The application of non-agricultural source material to land.	Application Of Non-Agricultural Source Material (NASM) To Land (Including Treated Septage)	1. The application of any quantity of non-agricultural source material that contains materials from a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	27

Prescribed Drinking Water Threat	Threat Subcategory	Pathogen Circumstance	Ref #
The application of non-agricultural source material to land.	Application Of Non-Agricultural Source Material (NASM) To Land (Including Treated Septage)	1. The application of any quantity of non-agricultural source material that contains materials from a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	27
The application of non-agricultural source material to land.	Application Of Non-Agricultural Source Material (NASM) To Land (Including Treated Septage)	1. The application of any quantity of non-agricultural source material that contains materials from a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	27
The application of non-agricultural source material to land.	Application Of Non-Agricultural Source Material (NASM) To Land (Including Treated Septage)	1. The application of any quantity of non-agricultural source material that contains materials from a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	27
The application of non-agricultural source material to land.	Application Of Non-Agricultural Source Material (NASM) To Land (Including Treated Septage)	1. The application of any quantity of non-agricultural source material that contains materials from a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	27
The application of non-agricultural source material to land.	Application Of Non-Agricultural Source Material (NASM) To Land (Including Treated Septage)	1. The application of any quantity of non-agricultural source material that contains materials from a meat plant or sewage works. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	28
The application of non-agricultural source material to land.	Application Of Non-Agricultural Source Material (NASM) To Land (Including Treated Septage)	1. The application of any quantity of non-agricultural source material that contains materials from a meat plant or sewage works. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	28
The application of non-agricultural source material to land.	Application Of Non-Agricultural Source Material (NASM) To Land (Including Treated Septage)	1. The application of any quantity of non-agricultural source material that contains materials from a meat plant or sewage works. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	28
The application of non-agricultural source material to land.	Application Of Non-Agricultural Source Material (NASM) To Land (Including Treated Septage)	1. The application of any quantity of non-agricultural source material that contains materials from a meat plant or sewage works. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	28
The application of non-agricultural source material to land.	Application Of Non-Agricultural Source Material (NASM) To Land (Including Treated Septage)	1. The application of any quantity of non-agricultural source material that contains materials from a meat plant or sewage works. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	28

Activities prescribed to be drinking water threats that are potential sources of E.Coli (WHPA-E)

Prescribed Drinking Water Threat	Threat Subcategory	Pathogen Circumstance	Ref #
The application of agricultural source material to land.	Application Of Agricultural Source Material (ASM) To Land	1. Agricultural source material is applied to land in any quantity. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	1
The application of agricultural source material to land.	Application Of Agricultural Source Material (ASM) To Land	1. Agricultural source material is applied to land in any quantity. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	1
The application of agricultural source material to land.	Application Of Agricultural Source Material (ASM) To Land	1. Agricultural source material is applied to land in any quantity. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	1
The application of agricultural source material to land.	Application Of Agricultural Source Material (ASM) To Land	1. Agricultural source material is applied to land in any quantity. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	1
The application of agricultural source material to land.	Application Of Agricultural Source Material (ASM) To Land	1. Agricultural source material is applied to land in any quantity. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	1
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as livestock grazing or pasturing land for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	2
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as livestock grazing or pasturing land for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	2
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as livestock grazing or pasturing land for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	2
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as livestock grazing or pasturing land for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	2
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as an outdoor confinement area or a farm-animal yard for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	3
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as an outdoor confinement area or a farm-animal yard for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	3
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as an outdoor confinement area or a farm-animal yard for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	3

Prescribed Drinking Water Threat	Threat Subcategory	Pathogen Circumstance	Ref #
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as an outdoor confinement area or a farm-animal yard for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	3
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	Management Or Handling Of Agricultural Source Material - Agricultural Source Material (ASM) Generation	1. The use of land as an outdoor confinement area or a farm-animal yard for one or more animals. 2. The land use may result in the presence of one or more pathogens in groundwater or surface water.	3
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Combined Sewer discharge from a stormwater outlet to surface water	1. The system is a combined sewer that may discharge sanitary sewage containing human waste to surface water. 2. The discharge may result in the presence of one or more pathogens in surface water.	4
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Sewage treatment plant bypass discharge to surface water	1. The system is a wastewater treatment facility that may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. 2. The discharge may result in the presence of one or more pathogens in surface water.	5
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Discharge Of Untreated Stormwater From A Stormwater Retention Pond	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The discharge may result in the presence of one or more pathogens in groundwater or surface water.	6
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Industrial Effluent Discharges	1. The system discharges to surface water and its primary functions include conveying sewage from a meat plant. 2. The discharge may result in the presence of one or more pathogens in surface water.	7
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Industrial Effluent Discharges	1. The system discharges to surface water and its primary functions include conveying sewage from a seafood processing operation. 2. The discharge may result in the presence of one or more pathogens in surface water.	8
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Industrial Effluent Discharges	1. The system discharges to surface water and its primary functions include conveying sewage from a dairy producer or a dairy product manufacturing operation. 2. The discharge may result in the presence of one or more pathogens in surface water.	9
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Industrial Effluent Discharges	1. The system discharges to surface water and its primary functions include conveying sewage from an animal food manufacturing operation that manufactures food from animal sources. 2. The discharge may result in the presence of one or more pathogens in surface water.	10
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Industrial Effluent Discharges	1. The system discharges to surface water and its primary functions include conveying sewage from a pulp and paper mill. 2. The discharge may result in the presence of one or more pathogens in surface water.	11
The management of agricultural source material.	Management Of Agricultural Source Material - Aquaculture	1. The use of land or water for aquaculture. 2. The land use may result in the presence of one or more pathogens in surface water.	12

Prescribed Drinking Water Threat	Threat Subcategory	Pathogen Circumstance	Ref #
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Septic System	1. The system is an earth pit privy, privy vault, cesspool, or a leaching bed system and its associated treatment unit and is a sewage system as defined in section 1 of O. Reg. 350/06 (Building Code) made under the Building Code Act, 1992 or a sewage works as defined in section 1 of the Ontario Water Resources Act. 2. A discharge from the system may result in the presence of one or more pathogens in groundwater or surface water.	13
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Septic System Holding Tank	1. The system requires or uses a holding tank for the retention of hauled sewage at the site where it is produced before its collection by a hauled sewage system. 2. A spill from the tank may result in the presence of one or more pathogens in groundwater or surface water.	14
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Sanitary Sewers and related pipes	1. The system is a wastewater collection facility that collects or transmits sewage containing human waste, but does not include any part of the facility that is a sewage storage tank or works used to carry out a designed bypass. 2. The discharge from the system may result in the presence of one or more pathogens in groundwater or surface water.	15
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Sewage Treatment Plant Effluent Discharges (Includes Lagoons)	1. The system is a wastewater treatment facility that discharges to surface water through a means other than a designed bypass. 2. A discharge may result in the presence of one or more pathogens in groundwater or surface water.	16
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Storage Of Sewage (E.G. Treatment Plant Tanks)	1. The system is a sewage treatment tank or sewage storage tank in either a wastewater collection facility or wastewater treatment facility, and any part of the tank is at or above grade. 2. A spill from the tank may result in the presence of one or more pathogens in groundwater or surface water.	17
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Storage Of Sewage (E.G. Treatment Plant Tanks)	1. The system is a sewage treatment tank or sewage storage tank in a wastewater collection facility or a wastewater treatment facility and the tank is below grade. 2. A spill from the tank may result in the presence of one or more pathogens in groundwater or surface water.	18
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. Any portion of the agricultural source material is stored at or above grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	19
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. Any portion of the agricultural source material is stored at or above grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	19
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. Any portion of the agricultural source material is stored at or above grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	19
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. Any portion of the agricultural source material is stored at or above grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	19
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Prescribed Drinking Water Threat	Threat Subcategory	Pathogen Circumstance	Ref #
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. Any portion of the agricultural source material is stored at or above grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	19
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. Any portion of the agricultural source material is stored at or above grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	19
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored entirely below grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	20
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored entirely below grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	20
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored entirely below grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	20
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored entirely below grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	20
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored entirely below grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	20
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored entirely below grade in or on a permanent nutrient storage facility. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	20
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored at a temporary field nutrient storage site. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	21
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored at a temporary field nutrient storage site. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	21
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored at a temporary field nutrient storage site. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	21

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The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored at a temporary field nutrient storage site. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	21
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored at a temporary field nutrient storage site. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	21
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored at a temporary field nutrient storage site. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	21
The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	1. The agricultural source material is stored at a temporary field nutrient storage site. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	21
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill, and any portion of the material is stored at or above grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	22
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill, and any portion of the material is stored at or above grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	22
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The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a meat plant, and any portion of the material is stored at or above grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	23
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill, and the material is stored entirely below grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	24

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The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill, and the material is stored entirely below grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	24
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The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill, and the material is stored entirely below grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	24
The handling and storage of non-agricultural source material.	Storage of Non-Agricultural Source Material (NASM)	1. The non-agricultural source material contains material generated by a meat plant, and the material is stored entirely below grade. 2. A spill of the material or runoff from an area where the material is stored may result in the presence of one or more pathogens in groundwater or surface water.	25
The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Application Of Untreated Septage To Land	1. Land application of hauled sewage in any quantity. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	26
The application of non-agricultural source material to land.	Application Of Non-Agricultural Source Material (NASM) To Land (Including Treated Septage)	1. The application of any quantity of non-agricultural source material that contains materials from a seafood processing operation, a dairy producer, a dairy product manufacturing operation, an animal food manufacturing operation that manufactures food from animal sources, or a pulp and paper mill. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	27
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APPENDIX E

PEER REVIEW

PEER REVIEW

- Water Budget
- Significant Groundwater Recharge Areas
- Surface Water Vulnerability

GROUNDWATER VULNERABILITY WATER BUDGET PEER REVIEW PROCESS

A rigorous peer review process was set out for the water budget component of the Assessment Report technical studies. The purpose of the peer review process was to ensure a scientifically defensible water budget and to ensure consistency with the provincial guidance and technical rules.

The peer review process was an ongoing, continuous approach from study initiation through completion. Input was solicited at various decision points through the use of technical memorandums, draft reports and committee meetings. Peer review comments were recorded and responses documented in a peer review report. The peer reviewers were required to sign-off on the final product.

The peer review committee was selected by source protection authority staff and is comprised of experts from the scientific and engineering communities. The committee included professionals with both surface water and groundwater expertise. The members are listed below:

CONCEPTUAL WATER BUDGETS

- Harold Belore, CCL/IBI Group
- Jim Buttle, Trent University
- Steve Davies, Conservation Authorities Moraine Coalition
- Bruce Kitchen , Trent Severn Waterway (retired)
- Ken Raven, Intera Engineering Ltd.
- Wayne Stiver , Peterborough Public Utilities

Ministry of Natural Resources reviewers were:

- Mike Garraway

TIER 1 WATER BUDGET

- Harold Belore, CCL/IBI Group
- Jim Buttle, Trent University
- Steve Davies, Gartner Lee
- Bruce Kitchen, Trent-Severn Waterway (retired)
- Ken Raven, Intera Engineering Ltd.
- Wayne Stiver , Peterborough Public Utilities

Ministry of Natural Resources reviewers were:

- Mike Garraway
- Lynne Milford

TIER 2 WATER BUDGETS

- Harold Belore, CCL/IBI Group
- Jim Buttle, Trent University
- Steve Davies, Gartner Lee/AECOM
- Bruce Kitchen, Trent-Severn Waterway (retired)
- Ken Raven, Intera Engineering Ltd.

Ministry of Natural Resources reviewers were:

- Mike Garraway
- Lynne Milford

PEER REVIEW SUMMARY

The methodology and data utilized in the water budget studies were well scrutinized by the peer reviewers. The peer reviewers ensured that all model set-ups used for these studies were of very good quality. Generally, the water budget studies received 5-7 rounds of peer review comments and corresponding responses from the study team, before the final "sign-offs" from the peer reviewers were obtained. In addition to the technical comments from the peer reviewers, the Ministry of Natural Resources also provided comments at the final stages of each study pertaining to the adequacy and relevance of the process followed with respect to the provincial requirements, which were also addressed by the study team. With the satisfactory conclusion of the studies and after the submission of the mandated "Peer Review Record" by the region, the province issued a "draft acceptance memo" for these studies.

The province has issued "draft acceptance memos" for the conceptual and tier-1 water budget studies as well as for the significant groundwater recharge areas study. The region is currently in the process of compiling the "Peer Review Record" for the tier-2 studies, which is a prerequisite for requesting the "draft acceptance memo" from the province.

SIGNIFICANT GROUNDWATER RECHARGE AREAS

The Significant Groundwater Recharge Area peer review was a component of the water budget peer review process. Ongoing peer review input was solicited and sign-off from the peer reviewers was required. Instead of involving the entire peer review committee, a sub-committee comprised of the two hydrogeologist was formed.

The peer reviewers were:

- Steve Davies, Gartner Lee
- Ken Raven, Intera Engineering Ltd.

Ministry of Natural Resources reviewers were:

- Mike Garraway
- Lynne Milford

SURFACE WATER VULNERABILITY (FOR MUNICIPAL SYSTEMS)

A peer review of the draft consultant reports was conducted for the intake protection zone delineation and vulnerability assessments for the 15 municipal surface water drinking water systems in the Trent source protection areas.

The peer review focused on the following:

a) Compliance with the Technical Rules
b) Appropriateness of model selection and or assessment technique
c) Reasonableness of the decisions made while developing, calibrating, and running the models or assessment technique
    - Appropriateness of the calibration technique employed given the availability of data, observed hydrodynamic conditions and the required use of the model
    - Appropriateness of any assumptions used in the development of the model or assessment technique.
d) Overall reasonableness of the results

A written response was provided in tabular form. The peer reviewer was asked to provide follow up comments on major issues identified. The Municipality or Conservation Authority leading the technical study being peer reviewed was required to indicate in writing that the peer review comments were satisfactorily addressed.

A request for proposals was released to solicit proposals from consultants to undertake the peer review. The following consultant was selected to undertake the review:

AECOM:

Bev Clark, Aquatic Scientist

Tammy Karst-Riddoch, Aquatic Scientist

Tara Smook, Environmental Engineer

PEER REVIEW SUMMARY

The vulnerability studies completed by XCG Consultant Ltd. were peer reviewed by AECOM Ltd. Peer review comments that were within the scope of the consultant's work plan were addressed to the satisfaction of Trent Conservation Coalition technical staff team. Overall, the peer reviewers were satisfied with the work completed but recommended that additional work be completed to re-assess the delineation of Intake Protection Zone 2 for the Lakefield, Kinmount, Peterborough, Marmora, Campbellford, Warkworth, Frankford, Batawa and Trenton intakes. XCG Consultants had also indicated a high uncertainty with the delineation of Intake Protection Zone 2 for these intakes.

To address this concern, hydrodynamic models were set up for stream segments in which the intakes were located. Additionally, orange float studies were completed for three sites: Trenton, Batawa and Peterborough. The earlier dye/drogue studies as well as these orange float studies were utilized to calibrate these models. 2-hour time of travel distances simulated from the model with a 2-year high flow inputs were used to delineate

the IPZ-2 zones. Due to the satisfactory calibration achieved, the IPZ-2 delineation uncertainty was re-assessed to “low”.

IPZ-2 for the Kinmount Intake delineated from the mathematical model is highly uncertain due to the limitation of bathymetry information required to build the model. Velocity of flow derived from actual field measurements (e.g. velocity tracking studies using orange floats) corresponding to a flow that is very close to a 2-year flow (approx. 100 cubic metres per second) would be necessary to delineate a reliable IPZ-2 for this intake. Due to the low flows encountered this year (i.e. the flows at Kinmount were much lower than 100 cumecs), these velocity tracking studies could not be completed this year. Thus, the IPZ-2 delineated for the Kinmount intake remains at “high” uncertainty.

GROUNDWATER VULNERABILITY (FOR MUNICIPAL SYSTEMS)

A peer review of the draft consultant reports was conducted for the wellhead protection area delineation and vulnerability assessment for the 31 municipal groundwater systems and one planned system in the Trent source protection areas.

The peer review focused on the following:

a) Compliance with the Technical Rules

b) Appropriateness of model selection and or assessment technique

c) Appropriateness of geological model/version used in the construction of the groundwater flow model

d) Reasonableness of the decisions made while developing, calibrating, and running the models
   - appropriateness of the data sets used to characterize hydrogeologic conditions
   - appropriateness of the boundary conditions established for each model domain
   - appropriateness of the calibration technique employed given the availability of information

e) Overall reasonableness of the results

A written response was provided in tabular form. The peer reviewer was asked to provide follow up comments on major issues identified. The Municipality or Conservation Authority leading the technical study being peer reviewed were required to indicate in writing that the peer review comments were satisfactorily addressed.

A request for proposals was released to solicit proposals from consultants to undertake the peer review. The following consultant was selected to undertake the review:

HARDEN ENVIRONMENTAL LTD.:

Stan Denhoed, Engineer/Hydrogeologist

PEER REVIEW SUMMARY

Groundwater Vulnerability

The peer reviewers found that reasonable efforts were made to determine groundwater vulnerability. The variety of methods used to determine vulnerability across the Trent source protection areas and their modifications resulted in non-standardized results across the SPA and also Province-wide. Despite this inconsistency, the Director's Rules were followed. Vulnerabilty of the aquifer is generally only known at specific locations (wells) and interpolation is required to determine thickness of geological layers at points elsewhere. Improvements to vulnerability assessments can only be improved through detailed geological characterization around the wellhead. The peer review of the updated vulnerability assessment for the new Lutterworth Pines groundwater system reiterated the importance of conducting additional field studies in the north so that a credible fractured media groundwater flow model could be developed.

Wellhead Protection Area Delineation

All of the WHPA delineations for existing municipal systems were determined by three dimensional groundwater flow models. The peer reviewers found that estimates of aquifer characteristics were generally reasonable. The

reviewers had issue with the constraining of WHPAs by arbitrary hydraulic conductivity assignments. Although the 'trial and observe' method of model development led the modelers to assign aquifer characteristics such that calibration to field tests were best represented in the model, there were several instances where these assignments were applied to relatively small areas around the wellhead and strongly influenced the size and shape of the WHPA.

The significant geological diversity within the Source Protection Area presents challenges to those preparing WHPA delineations and groundwater vulnerability determinations. The main challenge is the availability of good quality geological and hydrogeological information. The main source of information regarding subsurface geological formations is the Ministry of the Environment's water well record database. In addition to potential inaccuracy of the information available from this source, where population is scarce as it generally is throughout this SPA, the data availability from this source is also scarce. The scarcity of information leads to assumptions/interpolations needed for the characterization of, nature of and thickness of aquifers local to the wellfields. These assumptions directly influence the size and shape of well head protection areas and their vulnerabilities.

Time of travel calculations depend on estimates of aquifer characteristics such as recharge values, porosity and hydraulic conductivity. In general there are few actual determinations of these characteristics as measured by field testing or laboratory testing. The values assigned to these parameters are estimated and tested via a trial and observe process as the groundwater model is developed. This 'calibration' process does not always lead to a unique solution, thereby allowing for a different set of parameters to produce a similar and possibly improved solution to the groundwater flow system.

Summary

In summary, the peer review process contributed to significantly better model set-ups, especially in the assignment of boundary conditions, resulting in more credible model predictions (including the estimates of the components of water balance cycle). It also ensured that the consultants adhered to the Technical Rules.

APPENDIX F

LIST OF BACKGROUND REPORTS

LIST OF BACKGROUND REPORTS

- List of Background Reports
  - Watershed Characterization
  - Water Budget & Water Quantity Stress Assessment
  - Surface Water Systems: Water Quality Risk Assessment
  - Groundwater Systems: Water Quality Risk Assessment
  - Landscape-Scale Groundwater Analyses

WATERSHED CHARACTERIZATION

Watershed Characterization Report: Kawartha-Haliburton Source Protection Area (Kawartha Conservation Watershed), Kawartha Conservation (2008)

Watershed Characterization Report: Kawartha-Haliburton Source Protection Area (Burnt & Gull River Watersheds), Kawartha Conservation (2008)

Watershed Characterization Report: Otonabee-Peterborough Source Protection Area,Otonabee Conservation (2008)

Watershed Characterization Report: Crowe Valley Source Protection Area, Crowe Valley Conservation Authority (2008)

Watershed Characterization Report: Lower Trent Source Protection Area, Lower Trent Conservation (2008)

WATER BUDGET & WATER QUANTITY STRESS ASSESSMENT

Conceptual Water Budget: Trent River Watershed, Trent Conservation Coalition (March 2007)

Conceptual Water Budget: Lake Ontario/Bay of Quinte Tributaries (Lower Trent Watershed), Trent Conservation Coalition (March 2007)

Tier 1 Water Budget and Water Quantity Stress Assessment: Trent River Basin, Lake Ontario and Bay of Quinte tributaries (XCG Consultants Ltd, March 2010)

Technical Memorandum 3: Tier 2 Water Budget: Part 1 Lindsay Subwatershed (XCG Consultants Ltd., March 2010)

Final Report - Tier 2 Water Budget Report: Part 2 Havelock Subwatershed (XCG Consultants Ltd., April 2010)

Addendum Memo - Tier 2 Water Budget Update for Crowe-4 Subwatershed (XCG Consultants Ltd., December2010)

Final Report - Tier 2 Water Budget Analysis and Water Quantity Stress Assessment for Lake Ontario Subwatersheds 1 and 3 in the Brighton and Colborne Area (EarthFx Inc., April 2010)

SURFACE WATER SYSTEMS: WATER QUALITY RISK ASSESSMENT

VULNERABILITY ASSESSMENT

Vulnerability, Issues and Threats for Ten Surface Water Sourced Municipal Drinking Water Systems in the Trent Conservation Coalition Source Protection Region (XCG Consultants Ltd., July 2010)

Vulnerability, Issues and Threats for Six Surface Water Sourced Municipal Drinking Water Systems in the City of Kawartha Lakes (XCG Consultants Ltd., July 2010)

Technical Memorandum – Re-evaluated Vulnerability and Threats for the Trenton Drinking Water System after the De-commissioning of Batawa Drinking Water System (XCG Consultants Ltd., November 2010)

Technical Memorandum – IPZ-2 Modifications Incorporating Time of Travel Analysis within Municipal Storm Sewers and Re-assess Threats (XCG Consultants Ltd., December 2010)

ISSUES ASSESSMENT

Vulnerability, Issues and Threats for Ten Surface Water Sourced Municipal Drinking Water Systems in the Trent Conservation Coalition Source Protection Region XCG Consultants Ltd., (July 2010)

Vulnerability, Issues and Threats for Six Surface Water Sourced Municipal Drinking Water Systems in the City of Kawartha Lakes (XCG Consultants Ltd., July 2010)

Technical Memorandum on Issues Update for Norland Drinking Water System (March 2011)

THREATS ASSESSMENT

Vulnerability, Issues and Threats for Ten Surface Water Sourced Municipal Drinking Water Systems in the Trent Conservation Coalition Source Protection Region (XCG Consultants Ltd., July 2010)

Vulnerability, Issues and Threats for Six Surface Water Sourced Municipal Drinking Water Systems in the City of Kawartha Lakes (XCG Consultants Ltd., July 2010)

Technical Memorandum – Re-evaluated Vulnerability and Threats for the Trenton Drinking Water System after the De-commissioning of Batawa Drinking Water System (XCG Consultants Ltd., November 2010)

Technical Memorandum – IPZ-2 Modifications Incorporating Time of Travel Analysis within Municipal Storm Sewers and Re-assess Threats (XCG Consultants Ltd., December 2010)

GROUNDWATER SYSTEMS: WATER QUALITY RISK ASSESSMENT

VULNERABILITY ASSESSMENT

Assessment of Drinking Water Threats – Havelock Water Supply, Township of Havelock-Belmont-Methuen (GENIVAR Consultants, April 2010)

Assessment of Drinking Water Threats – Creighton Heights and Camborne Municipal Wellfields, Township of Hamilton (GENIVAR Consultants, June 2010)

Assessment of Drinking Water Threats – Municipal Residential Groundwater Supplies – The City of Kawartha Lakes (3 Volumes) (GENIVAR Consultants, August 2010)

Assessment of Drinking Water Threats – Municipal Groundwater Supplies – The Regional Municipality of Durham (August 2010)

Vulnerability, Issues and Threats for Fourteen Groundwater Sourced Municipal Drinking Water Systems in the Trent Conservation Coalition Source Protection Region (XCG Consultants, July 2010)

Appendix 1: Updated Wellfield Vulnerability analysis for the Keene Heights Wells (Earthfx Incorporated, November 2013)

Vulnerability, Issues and Threats for One Planned Groundwater Sourced Municipal Drinking Water System in the Trent Conservation Coalition Source Protection Region (XCG Consultants, July 2010)

Vulnerability, Issues and Threats for the new Lutterworth Pines Municipal Groundwater Sourced Drinking Water System (XCG Consultants Ltd., January 2011)

Final Report: Norwood Municipal Wells Updated Modelling: Township of Asphodel-Norwood (D.M. Wills Associates Limited, November, 2018)

Technical Memorandum re: Groundwater Vulnerability Assessment – Section 34 Update, (Azimuth Environmental Consulting, April 25, 2019)

Updated Well Vulnerability Analysis for the Town of Stirling-Rawdon, Ontario (BluMetric Environmental, July 10, 2019)

Canadiana Shores Drinking Water System Replacement Well (Cambium Inc., Oct 2019)

ISSUES ASSESSMENT

Vulnerability, Issues and Threats for Fourteen Groundwater Sourced Municipal Drinking Water Systems in the Trent Conservation Coalition Source Protection Region (XCG Consultants, July 2010)

Vulnerability, Issues and Threats for One Planned Groundwater Sourced Municipal Drinking Water System in the Trent Conservation Coalition Source Protection Region (XCG Consultants, July 2010)

Assessment of Drinking Water Threats – Havelock Water Supply, Township of Havelock-Belmont-Methuen (GENIVAR Consultants, April 2010)

Assessment of Drinking Water Threats – Creighton Heights and Camborne Municipal Wellfields, Township of Hamilton (GENIVAR Consultants, June 2010)

Assessment of Drinking Water Threats – Municipal Residential Groundwater Supplies – The City of Kawartha Lakes (3 Volumes) (GENIVAR Consultants, August 2010)

Assessment of Drinking Water Threats – Municipal Groundwater Supplies – The Regional Municipality of Durham (August 2010)

Vulnerability, Issues and Threats for the new Lutterworth Pines Municipal Groundwater Sourced Drinking Water System (XCG Consultants Ltd, January 2011)

Hydrogeological Assessment for PTTW Application: Keene, Ontario (Alpha Environmental Services Inc., February 2013)

THREATS ASSESSMENT

Vulnerability, Issues and Threats for Fourteen Groundwater Sourced Municipal Drinking Water Systems in the Trent Conservation Coalition Source Protection Region (XCG Consultants, July 2010)

Vulnerability, Issues and Threats for One Planned Groundwater Sourced Municipal Drinking Water System in the Trent Conservation Coalition Source Protection Region (XCG Consultants, July 2010)

Assessment of Drinking Water Threats – Havelock Water Supply, Township of Havelock-Belmont-Methuen (GENIVAR Consultants, April 2010)

Assessment of Drinking Water Threats – Creighton Heights and Camborne Municipal Wellfields, Township of Hamilton (GENIVAR Consultants, June 2010)

Assessment of Drinking Water Threats – Municipal Residential Groundwater Supplies – The City of Kawartha Lakes (3 Volumes) (GENIVAR Consultants, August 2010)

Assessment of Drinking Water Threats – Municipal Groundwater Supplies – The Regional Municipality of Durham (GENIVAR Consultants, August 2010)

Vulnerability, Issues and Threats for the new Lutterworth Pines Municipal Groundwater Sourced Drinking Water System (XCG Consultants Ltd., January 2011)

Enumeration of Drinking Water Threats for Keene Heights Drinking Water System (Otonabee Region Conservation Authority, January 2014)

Norwood Municipal Wells Updated Modelling: Township of Asphodel-Norwood (D. M. Wills Associates Limited, November, 2018)

LANDSCAPE-SCALE GROUNDWATER ANALYSES

Trent Conservation Coalition Groundwater Vulnerability Assessment – TCC Source Protection Region (AECOM, December 2009)

Significant Groundwater Recharge Areas for Tier-2 Studies in the Trent Conservation Coalition Area: Memo (XCG,October 2010)

Trent Source Water Protection Study Recharge Study: Final Report (CAMC, November 2009)

APPENDIX **G**

SECTION 34 AMENDMENT APPROVAL

Ministry of the Environment and Climate Change

Office of the Minister

77 Wellesley Street West
11th Floor, Ferguson Block
Toronto ON M7A 2T5
Tel.: 416-314-6790
Fax: 416-314-6748

Ministère de l'Environnement et de l'Action en matière de changement climatique

Bureau du ministre

77, rue Wellesley Ouest
11e étage, edifice Ferguson
Toronto ON M7A 2T5
Tél. : 416-314-6790
Téléc: 416-314-6748

Ontario

FEB 14 2018

ENV1283MC-2018-126
CR: ENV1283MC-2012-2374

Mr. Jim Hunt, Chair
Trent Conservation Coalition SPC
4 Diane Place
Port Hope ON L1A 3Y6

and

Mr. Ted Smith, Chair
Kawartha Conservation Authority
277 Kenri Road
Lindsay ON K0V 4R1

Dear Mr. Hunt and Mr. Smith:

It is a pleasure to inform you that the ministry has completed the review of the amended Trent Conservation Coalition source protection plan, including the assessment report for the Kawartha-Haliburton source protection area, submitted under section 34 of the Clean Water Act, 2006. Pursuant to section 29 of the Clean Water Act, I approve this amended plan and assessment report. This amendment will take effect on upon posting the notice of approval of plan amendments on Ontario's Environmental Registry.

When the initial plan was approved, an order was given under section 36 of the Clean Water Act that governs the future review of the plan. The requirements that govern that review remain unchanged with the approval of this amendment.

The amended source protection plan includes policies that requests the province create and modify programs as it relates to tier 3 water budgets. The ministry very much appreciates the advice of the source protection committee and authority on how it may protect drinking water sources. The ministry is continuing to conduct an analysis on how to best achieve the policy objectives. The results of this analysis will be communicated to the source protection authority when the ministry reports on its implementation of policies in the plan.

The ongoing efforts to protect sources of drinking water by the Trent Conservation Coalition Source Protection Committee, the five source protection authorities, and all stakeholders are appreciated. Thank you for all your dedication and hard work.

With your commitment, significant progress has been made in source protection and the province looks forward to continuing to work with you and all stakeholders to protect drinking water.

Once again, thank you for your work to protect Ontario's source waters, and please accept my best wishes.

Sincerely,

Chris Ballard
Minister

c: Chris Wilkinson, Program Coordinator, Trent Conservation Coalition Source Protection Region
Glenda Rogers, Chief Administrative Officer, Lower Trent Conservation
Mark Majchrowski, Director, Kawartha Conservation Authority
Paul Evans, Deputy Minister, Ministry of the Environment and Climate Change
Orna Salamon, Assistant Deputy Minister, DWMD, MOECC
Heather Malcolmson, Director, SPPB, MOECC

Ministry of the Environment, Conservation and Parks

Office of the Minister

777 Bay Street, 5th Floor
Toronto ON M7A 2J3
Tel.: 416-314-6790

Ministère de l'Environnement, de la Protection de la nature et des Parcs

Bureau du ministre

777, rue Bay, 5e étage
Toronto (Ontario) M7A 2J3
Tél. : 416.314.6790

Ontario

357-23019-1603
CR: ENV1283MC-2018-126

AUG 15 2019

Jim Alyea, Chair
Lower Trent Conservation Authority
714 Murray Street, R.R.#1
Trenton, ON K8V 5P4

Andy Mitchell
Otonabee Conservation Authority
250 Milroy Drive
Peterborough, ON K9H 7M9

James Hunt, Chair
Trent Conservation Coalition Source
Protection Committee
4 Diane Place
Port Hope, ON L1A 3Y6

Dear Mr. Alyea, Mr. Mitchell, and Mr. Hunt,

It is a pleasure to inform you that the ministry has completed the review of the amended Trent Source Protection Plan and Assessment Report, developed under the *Clean Water Act, 2006* that address changes to the Norwood drinking water system. Pursuant to section 34 of the *Clean Water Act*, I approve the amendments. These amendments will take effect on the day a notice of this decision is posted on the Environmental Registry.

The approval of these amendments does not make any changes to the recently amended order under section 36 of the *Clean Water Act* that governs the future review of the plan.

The ongoing efforts to protect sources of drinking water by the Trent Conservation Coalition Source Protection Committee, the source protection authorities, and all stakeholders are appreciated. Please accept my thanks for your dedication and hard work to protect Ontario's sources of drinking water.

Sincerely,

Jeff Yurek
Minister

Enclosure

C: Valerie Bowering, Program Coordinator, TCC Source Protection Region
Rhonda Bateman, Chief Administrative Officer, Lower Trent Conservation
Susan Ecclestone, Director, Source Protection Programs Branch, MECP
Debbie Scanlon, Approvals Manager, Source Protection Programs Branch, MECP
Angelune Des Lauriers, Program Analyst, MECP
Mary Wooding, Liaison Officer, MECP

Ministry of the Environment, Conservation and Parks

Office of the Minister

777 Bay Street, 5th Floor
Toronto ON M7A 2J3
Tel.: 416-314-6790

Ministère de l'Environnement, de la Protection de la nature et des Parcs

Bureau du ministre

777, rue Bay, 5e étage
Toronto (Ontario) M7A 2J3
Tél. : 416.314.6790

Ontario

June 8, 2020

357-2020-129

Jim Alyea, Chair
Lower Trent Conservation Authority
714 Murray Street, R.R.#1
Trenton, ON K8V 5P4

James Hunt, Chair
Trent Conservation Coalition Source Protection Committee
4 Diane Place
Port Hope, ON L1A 3Y6

Dear Mr. Alyea, and Mr. Hunt,

I'm pleased to inform you that the ministry has completed the review of the amended Trent Source Protection Plan and Assessment Report, developed under the *Clean Water Act, 2006,* that address changes to the Stirling and Pinewood drinking water systems.

To ensure that the quality of Ontario's municipal drinking water sources continue to be protected in the Trent Conservation Coalition Source Protection Region, I approve the amendments pursuant to section 34 of the *Clean Water Act*, *2006*. These amendments will take effect on the day a notice of this decision is posted to the Environmental Registry.

The approval of these amendments does not make any changes to the order under section 36 of the *Clean Water Act*, *2006* amended in May 2019, that governs the future review of the plan.

We appreciate the dedication of the Trent Conservation Coalition Source Protection Committee, the source protection authorities, and all stakeholders to the protection of our province's drinking water sources. Your commitment to building on the significant work completed to date is truly commendable.

Protecting Ontario's water resources for future generations is a key commitment in our Made-in-Ontario Environment Plan and the province looks forward to continuing to work with you.

Sincerely,

Jeff Yurek
Minister

C: Keith Taylor, Program Coordinator, TCC Source Protection Region
Rhonda Bateman, Chief Administrative Officer, Lower Trent Conservation
Keley Katona, Director, Source Protection Programs Branch, MECP
Angelune Des Lauriers, Program Analyst, MECP
Mary Wooding, Liaison Officer, MECP