



The Regional Municipality of Durham

Works Committee Agenda

Council Chambers
Regional Headquarters Building
605 Rossland Road East, Whitby

Wednesday, March 2, 2022

9:30 AM

Please note: In an effort to help mitigate the spread of COVID-19, and to generally comply with the directions from the Government of Ontario, it is requested in the strongest terms that Members participate in the meeting electronically. Regional Headquarters is closed to the public, all members of the public may [view the Committee meeting](#) via live streaming, instead of attending the meeting in person. If you wish to register as a delegate regarding an agenda item, you may register in advance of the meeting by noon on the day prior to the meeting by emailing delegations@durham.ca and will be provided with the details to delegate electronically.

1. Roll Call

2. Declarations of Interest

3. Adoption of Minutes

A) Works Committee meeting – February 2, 2022

Pages 4 - 14

4. Statutory Public Meetings

There are no statutory public meetings

5. Delegations

There are no delegations

6. Presentations

- 6.1 Peter Veiga, Manager of Waste Management Services, re: Blue Box Transition Impacts on Waste Management Collection Operations and Small Business Recycling Options (2022-WR-2) [Item 7.2 A)]

7. Waste

- 7.1 Correspondence

- 7.2 Reports

- A) Blue Box Transition Impacts on Waste Management Collection Operations and Small Business Recycling Options (2022-WR-2) 15 - 35

8. Works

- 8.1 Correspondence

- 8.2 Reports

- A) The Regional Municipality of Durham's Drinking Water Systems 2021 Summary Report (2022-W-14) 36 - 90

- B) Authorization of Subdivision Agreement with Beaverton Lake Homes Inc., Including Cost Sharing in Accordance with the Region Share Policy, for the Extension and Oversizing of Regional Services in the Township of Brock (2022-W-15) 91 - 99

- C) Ontario Government – Improving Wastewater and Stormwater Discharges in Lake Ontario Program (2022-W-16) 100 - 103

- D) Standardization of Air Conditioning Equipment Manufactured by Liebert for the Durham Regional Police Service Facilities (2022-W-17) 104 - 106

- E) Road Rationalization: Transfer of Roads Between the Regional Municipality of Durham and the Town of Whitby (2022-W-18) 107 - 115

9. Advisory Committee Resolutions

There are no advisory committee resolutions to be considered

10. Confidential Matters

There are no confidential matters to be considered

11. Other Business

12. Date of Next Meeting

Wednesday, April 6, 2022 at 9:30 AM

13. Adjournment

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The Regional Municipality of Durham

MINUTES

WORKS COMMITTEE

Wednesday, February 2, 2022

A regular meeting of the Works Committee was held on Wednesday, February 2, 2022 in Council Chambers, Regional Headquarters Building, 605 Rossland Road East, Whitby, Ontario at 9:30 AM. Electronic participation was offered for this meeting.

1. Roll Call

Present: Councillor Mitchell, Chair
Councillor Marimpietri, Vice-Chair
Councillor Barton
Councillor Crawford
Councillor McLean
Councillor John Neal
Councillor Smith
Regional Chair Henry

Also

Present: Councillor Dies
Councillor Drew
Councillor Foster left the meeting at 11:19 AM
Councillor Grant
Councillor Hight
Councillor Mulcahy
Councillor Wotten

Staff

Present: E. Baxter-Trahair, Chief Administrative Officer
G. Anello, Director of Waste Management
B. Bridgeman, Commissioner of Planning & Economic Development
J. Demanuele, Director of Business Services, Works Department
W. Holmes, General Manager, DRT
L. Fleury, Legislative Officer and Deputy Clerk Pro Tem, Corporate Services – Legislative Services
J. Hunt, Regional Solicitor/Director of Legal Services, Corporate Services – Legal Services
R. Inacio, Systems Support Specialist, Corporate Services – IT
R. Jagannathan, Director of Transportation and Field Services
N. Pincombe, Director, Business Planning and Budgeting
J. Presta, Director of Environmental Services
S. Siopis, Commissioner of Works
N. Taylor, Commissioner of Finance

R. Walton, Regional Clerk/Director of Legislative Services
N. Prasad, Assistant Secretary to Council, Corporate Services –
Legislative Services
S. Simone, Committee Clerk, Corporate Services – Legislative Services

2. Declarations of Interest

Councillor Marimpietri made a declaration of interest under the Municipal Conflict of Interest Act with respect to Section 4.1(f) of Report #2022-W-13: 2022 Works Department Business Plans and Budgets. He indicated that he has family members who own property and reside within an area potentially being considered for an Anaerobic Digestion facility.

3. Adoption of Minutes

Moved by Councillor Barton, Seconded by Councillor McLean,
(12) That the minutes of the regular Works Committee meeting held on
Wednesday, January 12, 2022, be adopted.

CARRIED

4. Statutory Public Meetings

There were no statutory public meetings.

5. Delegations

There were no delegations to be heard.

6. Presentations

6.1 Ramesh Jagannathan, Director of Transportation and Field Services, and Gioseph Anello, Director of Waste Management Services, re: 2022 Business Plans and Budgets for the Works Department's General Tax and Solid Waste Management Operations (2022-W-13) [Item 8.2 G]

Ramesh Jagannathan, Director of Transportation and Field Services, and Gioseph Anello, Director of Waste Management Services, provided a PowerPoint Presentation with regards to the 2022 Business Plans and Budgets for the Works Department's General Tax and Solid Waste Management Operations.

S. Siopis introduced R. Jagannathan, G. Anello and N. Pincombe and provided a brief background on the 2022 Business Plans and Budgets for the Works Department's General Tax and Solid Waste Management Operations.

Highlights of the Presentation included:

- 2022 Business Plans and Budgets – Works Department
- Budget Overview – Solid Waste Management
 - 2021 Accomplishments
 - 2022 Proposed Expenditures & Financing
 - 2022 Strategic Highlights
 - 2022 Business Plan and Budgets - Risks and Uncertainties
 - Beyond the 2022 Business Plans and Budget
- Budget Overview – Roads & Infrastructure
 - 2021 Accomplishments
 - 2022 Proposed Expenditures & Financing
 - 2022 Strategic Highlights
 - Roads Capital Planning Framework
 - Proposed 2022 Growth Related Projects
 - Proposed 2022 Road Rehabilitation Projects
 - Anticipated Road Capital Works on the ground in 2022
 - Proposed 2022 Structures Replacement/Rehabilitation Projects
 - Proposed 2022 Traffic Programs
 - 2022 Priorities and Highlights
 - ICIP BRT Projects
 - Road Projects in Forecast
- Staffing, Risks & Uncertainties and Future Budget Pressures
- 2022 Strategic Highlights
- Staffing Trend vs Asset Values 2012-2022
- Growth in Regional Services through Development Applications
- 2022 Business Plans and Budgets - 2022 Risks and Uncertainties
- Beyond the 2022 Business Plans and Budget

Staff responded to questions with regards to whether the majority of construction for the BRT is covered under a grant and whether the grant covers improvements to the intersections; whether Metrolinx has received funding for transit lanes through Pickering Village; with respect to tickets issued via the Automated Speed Enforcement and red light camera program, whether municipalities will be receiving a percentage of the tickets issued and paid for; what makes recycling from the BIA different from other recycling; and promotion and education provided to residents.

Staff also responded to questions with regards to the materials being taken to the Durham York Energy Centre and how it gets there; the necessity to rehabilitate Columbus Road; excess soil applications; revenue from hydrant use; details surrounding the Farewell Street project and the Finch Avenue project (from Altona Road to Brock Road); whether there can be a process to put revenues back into a dedicated fund to deal with red light cameras or speeding cameras; and clarification on the completion of the Adelaide Extension.

7. Waste

7.1 Correspondence

There were no items of correspondence to consider.

7.2 Reports

There were no Waste Reports to consider.

8. Works

8.1 Correspondence

There were no items of correspondence to consider.

8.2 Reports

A) Memorandum of Understanding with the Mississaugas of Scugog Island First Nation and the Regional Municipality of Durham related to Water Supply and Wastewater Systems (2022-W-7)

Report #2022-W-7 from S. Siopis, Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor McLean,
(13) That we recommend to Council:

- A) That the Regional Municipality of Durham enter into a Memorandum of Understanding with the Mississaugas of Scugog Island First Nation related to their water supply and wastewater systems in a form satisfactory to the Commissioner of Works and the Regional Solicitor;
- B) That a copy of Report #2022-W-7 of the Commissioner of Works be provided to the Township of Scugog; and
- C) That the Regional Chair and Clerk be authorized to execute the required documentation related to the Memorandum of Understanding.

CARRIED

B) Standardization and Sole Source Acquisition of Workstation Booking Subscription Services from OfficeSpace Software Inc. (2022-W-8)

Report #2022-W-8 from S. Siopis, Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor McLean,
(14) That we recommend to Council:

- A) That the Regional Municipality of Durham standardize on OfficeSpace Software Inc. to facilitate workstation booking capabilities;
- B) To enter into a negotiated sole source agreement with OfficeSpace Software Inc. for the provision of a workstation booking subscription service for a period of up to five years at an annual cost of approximately \$80,000* to be financed through the annual Regional Headquarters Business Plan and Budget; and
- C) That the Commissioner of Finance be authorized to execute the necessary documents related to the sole source agreement.
(* before applicable taxes)

CARRIED

- C) Approval of Capital Works and Financing to be Incorporated into a Servicing Agreement with CSPAC Industrial Garrard GP, Inc., Including Cost Sharing in accordance with the Region Share Policy, for the Extension and Oversizing of a Sanitary Sewer and construction of a Local Watermain under the Region's Well Interference Policy, in the Town of Whitby (2022-W-9)

Report #2022-W-9 from S. Siopis, Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor McLean,
(15) That we recommend to Council:

- A) That capital works and financing estimated at \$3,157,600 for the Region's share of the extension and oversizing of a sanitary sewer and construction of a watermain, in the Town of Whitby, at an estimated total project cost of \$6,669,000 be approved;
- B) That the Regional Municipality of Durham be authorized to enter into a Servicing Agreement with a Region Share payment to CSPAC Industrial Garrard GP, Inc. estimated at \$3,157,600 for the extension and oversizing of a sanitary sewer and construction of a local watermain, in the Town of Whitby, at an estimated total project cost of \$6,669,000;
- C) That financing for the servicing agreement be provided from the following sources:

Developer's Share – Sanitary Sewer

CSPAC Industrial Garrard GP, Inc. \$3,511,400

Total Developer's Share **\$3,511,400**

Regional Share – Sanitary Sewer

2022 Sanitary Sewerage System Capital Budget

Item 122: Expansion of the Conlin Rd. Sanitary Sewage Pumping Station and twinning of the forcemain, in the City of Oshawa

Residential Development Charges (Project ID: D1825)	\$1,106,400
Commercial Development Charges (Project ID: D1825)	69,000
User Rate (Project ID: D1825)	<u>323,800</u>

Total Regional Share – Sanitary Sewer **\$1,499,200**

Total Project Estimate Sanitary Sewer **\$5,010,600**

Regional Costs – Watermain

2022 Water Supply System Capital Budget

Item 315: Well interference

Residential Development Charges (Project ID: M2214)	\$1,000,000
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Additional Water Supply Financing

2022 Water Supply System Capital Budget

Item 303: Allowance for Regional share for works in conjunction with non-residential development

Residential Development Charges (Project ID: M2214)	\$350,400
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Item 304: Allowance for Regional share for works in conjunction with residential development

Residential Development Charges (Project ID: M2210)	<u>\$308,000</u>
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Total Regional Cost – Watermain **\$1,658,400**

Total Regional Share **\$3,157,600**

Total Project Financing **\$6,669,000**

CARRIED

- D) Status Update on the Request from Hamilton Oshawa Port Authority for the Assumption of Ownership of Farewell Street (Regional Road 56) South of Harbour Road, City of Oshawa (2022-W-10)

Report #2022-W-10 from S. Siopis, Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor McLean,
(16) That we recommend to Council:

- A) That Regional staff complete the due diligence and all steps necessary to facilitate the Hamilton Oshawa Port Authority's assumption of ownership of Farewell Street (Regional Road 56) south of Harbour Road in the City of Oshawa, and report back with a recommendation;
- B) That such transfer of ownership to the Hamilton Oshawa Port Authority be conditional on acceptance from the landowner of 1221 Farewell Street and 1241 Farewell Street, currently McAsphalt Industries Limited, in the City of Oshawa;
- C) That the City of Oshawa Correspondence File: F-3041-0028, dated October 4, 2021 (Attachment #1 to Report #2022-W-10) be received for information;
- D) That a copy of Report #2022-W-10 of the Commissioner of Works be provided to the City of Oshawa for information; and
- E) That a copy of Report #2022-W-10 of the Commissioner of Works be provided to the Hamilton Oshawa Port Authority for information.

CARRIED

- E) Approval of Capital Works to be Incorporated into a Servicing Agreement with Seaton TFPM Inc. for the Construction of local water and sanitary sewer services and a Seaton Area Specific Development Charge Watermain to be Included in a Future Front Ending Agreement with the Seaton Landowners Group, in The City of Pickering (2022-W-11)
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Report #2020-W-11 from S. Siopis, Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor McLean,
(17) That we recommend to Council:

- A) That the Regional Municipality of Durham be authorized to enter into a servicing agreement with Seaton TFPM Inc. for the construction of local water and sanitary sewer services and a Seaton Area Specific Development Charge watermain project, including a commitment to providing Development Charge Credits (\$630,100) in a future front ending agreement with the Seaton Landowner's Group, with an estimated total project cost of \$11,317,900;
- B) That financing for the capital works, estimated at \$11,317,900, be provided from the following sources:

Local Water and Sanitary Sewer Services

Developer's Share – Sanitary Sewer
Seaton TFPM Inc \$9,006,000

Total Developer's Sanitary Sewer Share \$9,006,000

Developer's Share – Water Supply
Seaton TFPM Inc \$902,100

Total Developer's Water Supply Share \$902,100

Total Developer's Share – Local Services \$9,908,100

Seaton Area Specific Development Charge Project

Water Supply – Phase 2 Watermain Project

Developer Share \$630,100

Water User Revenue 779,700

Total Region Water Supply Share \$1,409,800

Total Project Financing \$11,317,900

- C) That the Regional Municipality of Durham provide the water user revenue portion (\$779,700) upon completion of the watermain by Seaton TFPM Inc. and these costs be funded at the discretion of the Commissioner of Finance and be included in future development charges studies to allow the Regional Municipality of Durham to recover the appropriate amounts as allowed under the Development Charges Act; and
- D) That the portion of the watermain costs (\$630,100) upfronted by Seaton TFPM Inc. be subject to receiving Seaton Area Specific Development Charge credits in a future Front-ending Agreement with the Seaton Landowners Group.

CARRIED

- F) Update on Regional Road 18 Pilot Reconstruction Project using Recycled Waste Materials and Approval to Tender and Construct Phase 2 (2022-W-12)

Report #2022-W-12 from S. Siopis, Commissioner of Works, was received.

Staff was asked to provide a brief overview of the Regional Road 18 Pilot Reconstruction Project.

Staff responded to questions with regards to the process involved with the seasoned bottom ash; the materials to be used on the surface and the base; whether there has been an analysis on the cost savings; and what would be involved in shifting the pilot outside of Clarington.

Moved by Regional Chair Henry, Seconded by Councillor McLean,
(18) That we recommend to Council:

- A) That the update on Phase 1 of the Regional Road #18 pilot project be received; and
- B) That the Regional Municipality of Durham Council authorize staff to tender and construct Phase 2 of the Regional Road #18 Pilot Reconstruction Project based on the high-level specifications outlined in Report #2022-W-12 of the Commissioner of Works, with financing previously approved for this initiative as part of the 2019 Federal Gas Tax Funding allocation.

CARRIED ON THE FOLLOWING
RECORDED VOTE:

Yes

Councillor Barton
Councillor Crawford
Regional Chair Henry
Councillor Marimpietri
Councillor McLean
Councillor Smith
Chair Mitchell

No

Councillor John Neal

Members Absent: None

Declarations of Interest: None

G) 2022 Works Department Business Plans and Budgets (2022-W-13)

Report #2022-W-13 from S. Siopis, Commissioner of Works, was received.

Moved by Councillor Marimpietri, Seconded by Councillor McLean,
(19) That the Works Committee recommends to the Finance and Administration Committee for subsequent recommendation to Regional Council:

That the 2022 Business Plans and Budgets of the Works Department's General Tax and Solid Waste Management operations be approved.

CARRIED LATER IN THE MEETING ON A
RECORDED VOTE

It was the consensus of the Committee to divide Section 4.1 (f) from Report #2022-W-13 in order to vote on it separately, due to Councillor Marimpietri's stated conflict of interest. Councillor Marimpietri did not vote on items related to his conflict.

Section 4.1(f) of Report #2022-W-13 was then put to a vote and CARRIED.

The main motion (19) of Councillors Marimpietri and McLean was put to a vote and CARRIED ON THE FOLLOWING RECORDED VOTE:

<u>Yes</u>	<u>No</u>
Councillor Barton	Councillor John Neal
Councillor Crawford	
Regional Chair Henry	
Councillor Marimpietri	
Councillor McLean	
Councillor Smith	
Chair Mitchell	

Members Absent: None

Declarations of Interest: None

9. **Advisory Committee Resolutions**

There were no advisory committee resolutions to be considered.

10. **Confidential Matters**

There were no confidential matters to be considered.

11. **Other Business**

11.1 Update on Vision Zero

Councillor Crawford provided an update with regards to Vision Zero and the discussion at the Township of Brock Council meeting regarding the installation of signage at Regional Road 23 and Highway 48 due to speeding and dangerous driving conditions. She advised that it was discussed that signage encouraging drivers to call 911 may not be the best option to discourage speeding, but the installation of road watch signs would work, as well as posting speed counters.

12. Date of Next Meeting

The next regularly scheduled Works Committee meeting will be held on Wednesday, March 2, 2022 at 9:30 AM in Council Chambers, Regional Headquarters Building, 605 Rossland Road East, Whitby.

13. Adjournment

Moved by Councillor Smith, Seconded by Councillor Crawford,
(20) That the meeting be adjourned.

CARRIED

The meeting adjourned at 11:28 AM

Respectfully submitted,

D. Mitchell, Chair

N. Prasad, Assistant Secretary to Council

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: 2022-WR-2
Date: March 2, 2022

Subject:

Blue Box Transition Impacts on Waste Management Collection Operations and Small Business Recycling Options

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That staff be authorized to extend Standing Agreement C002459 with Miller Waste for the Curbside Collection of Non-Hazardous Waste, Recyclables and Organics from residences and multi-residential properties in the City of Pickering and the Town of Ajax, for one year commencing July 1, 2023 and ending on June 30, 2024, to align this agreement with the Regional Municipality of Durham's transition from the Blue Box program (July 1, 2024), at an annual cost of approximately \$8.5 million annually, resulting in a net cost increase of approximately \$0.8 million annually, to be funded from the Solid Waste Management Business Plan and Budgets;
- B) That staff be authorized to negotiate with Producer Responsibility Organizations of the new Blue Box program and report back on the financial implications to include the collection of recyclables from the small businesses identified in this report in both Attachments #1 and #2 in the Producer Responsibility Organizations collection programs, on a cost recovery basis, as well as alternative options and recommendations for Regional Council to consider if negotiations with the Producer Responsibility Organizations fail;

- C) That Regional Council provide direction to staff from one of the following two options:
- i) Option 1 – to initiate the phase-out of the collection of Non-Hazardous Waste, Recyclables and Organics in the Townships of Brock, Uxbridge, Scugog, the Municipality of Clarington and in the City of Pickering and Town of Ajax (under Standing Agreements C003008 and C002459 respectively) and the collection of Recyclables in the Town of Whitby and the City of Oshawa (under Standing Agreement C002667) for the small businesses listed in Attachment #2; or
 - ii) Option 2 - to formally amend the Standing Agreements to include these small businesses on an interim basis until such time as a further recommendation is brought to Regional Council, at no additional cost to the Regional Municipality of Durham; and,
- D) That the Commissioner of Finance be authorized to execute all documents related to the contract amendments.
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Report:**1. Purpose**

- 1.1 The purpose of this report is to seek Regional Council direction on the future provision of recycling services to the Regional Municipality of Durham's (Region) small businesses currently receiving municipal recycling collection services after the Regional transitions out of the Blue Box recycling program on July 1, 2024, and to amend the Region's Standing Agreement C002459 for Non-Hazardous Waste, Recyclables and Organics collection services in the City of Pickering and the Town of Ajax with a one-year extension.
- 1.2 Dollar amounts followed by an asterisk (*) are before applicable taxes.

2. Background

- 2.1 On July 1, 2024, the Region will transition out of its Blue Box recycling program and producers of the products and packaging managed in the Blue Box will be fully responsible for the program under a new Extended Producer Responsibility (EPR) regime. The new Blue Box program will be operated by Producer Responsibility Organizations (PROs) on behalf of Blue Box producers, and it will not include recycling services to businesses of any kind.

- 2.2 The Region provides non-hazardous waste, recyclables and organics collection services to small businesses in Designated Business Areas (DBAs), which includes Business Improvement Areas (BIAs), under the following Standing Agreements;
- a. C003008 covering the Townships of Brock, Uxbridge, Scugog, and the Municipality of Clarington; and,
 - b. C002459 covering the City of Pickering and Town of Ajax; and,
 - c. C002667 covering recyclables collection only in the Town of Whitby and the City of Oshawa
- 2.3 The Region also provides non-hazardous waste, recyclables and organics collection services to approximately 200 additional small businesses, listed in Attachment #2, that are not formally included in the agreements noted in item 2.2. These businesses are not located in DBAs and they do not meet the requirements for municipal waste collection, but they were included when the Region assumed waste collection services from its Local Area Municipalities in the early 1990s. These properties include gas stations, churches, strip malls, flea markets, auto body shops, garages, nurseries, golf courses, doctor and dentist offices, pharmacies, hair salons and veterinary clinics. They have never been formally listed in the Region's waste collection agreements and, along with the small businesses noted in section 2.2, will not be eligible to receive recycling services under the new Blue Box program unless the Blue Box PROs agree to service them under a cost recovery agreement with the Region.
- 2.4 Finally, the Region continues to prepare for the transition of the Region's Blue Box program by aligning its recycling collection and processing contract expiry dates with its July 1, 2024, transition or, including off ramp clauses where possible. The last remaining contract that requires aligning is Standing Agreement C002459 for Non-Hazardous Waste, Recyclables and Organics collection services in the City of Pickering and the Town of Ajax, which requires a one-year extension as it currently expires on June 30, 2023.

3. Previous Reports and Decisions

- 3.1 In Report #2020-COW-15 "Council Resolution - Blue Box Transition Date" Council endorsed a resolution on transition to full EPR attached to the report and to forward same to the Minister of the Environment Conservation and Parks and Association of Municipalities of Ontario.

3.2 Council has authorized contract alignments and staff participation in the Blue Box consultation and transition process in the following reports:

- a. Report #2020-COW-3 “Solid Waste Management: 2020 Strategic Issues and Financial Forecast”; and,
- b. Report #2019-COW-3 “Solid Waste Management Servicing and Financing Study”.

4. Impact of Extended Producer Responsibility (EPR) on Durham’s Small Businesses

4.1 Businesses are not eligible to receive recycling collection services under the new Blue Box Program after the Region transitions on July 1, 2024.

4.2 Durham’s long-held provision of recycling services to the small businesses listed in Attachments #1 and #2 has created a reliance by these businesses on the Region’s continued support. Removing this service may result in hardship for these businesses to continue recycling at their own cost after the Region transitions. It is anticipated that without concerted effort to promote options, many of these small businesses may likely choose to stop recycling.

4.3 The Region can help ensure that these small businesses continue receiving recycling services after the Region transitions out of the Blue Box program by negotiating with PROs to include them in the new Blue Box program. Durham staff has worked extensively with AMO on this matter to confirm that PROs may be open to this possibility on a cost recovery basis.

4.4 The Region may also enter a dedicated contract for the collection and processing of recyclables from these businesses.

4.5 Alternatively, the Region can leave it to the small businesses to enter their own private contracts for recycling services after the Region transitions from the Blue Box program.

5. Risks of Grandfathering Non-DBA Small Businesses

5.1 While the Region provides municipal Non-Hazardous Waste, Recycling and Organics collection services to the small business listed in Attachment #2, other than history, there is nothing that distinguishes these small businesses from the other small businesses throughout the Region that are not located within DBAs

and that do not currently receive municipal non-hazardous waste, recycling and organics collection services.

- 5.2 Amending Standing Agreements C003008, C002459, and C002667 to formally include the small businesses listed in Attachment #2 would lend support to the negotiation with PROs for the continued provision of recycling services after the Region transitions from the Blue Box program. However, should Council elect to include these small businesses formally into its municipal non-hazardous waste, recycling and organics collection agreements, Council could expect many neighbouring small businesses to also request these services be provided to them.
- 5.3 Providing a level playing field to all Durham businesses like those listed in Attachment #2 would require terminating municipal non-hazardous waste, recycling and organics collection services to the small businesses listed in Attachment #2, or alternatively, possibly expanding these services to all similar small businesses. The latter alternative would not be financially feasible and would put the Region in direct competition with private sector service providers.
- 5.4 Should the final decision be to discontinue these services at the Regional level, staff will recommend sufficient notification requirements for the phase-out of these grandfathered non-standardized local commercial DBA and BIA waste collection services, including reporting of any Regional financial implications during the phase-out period.

6. Financial Implications

- 6.1 Table 1 summarizes a count, by Local Area Municipality, and the costs to provide non-hazardous waste, recyclables and organics collection services to the Region's small businesses that are currently included in Region's contracts (DBA Stops) and listed in Attachment #2 (Non-DBA Stops).

Table 1: Small Businesses Currently Receiving Municipal Waste Collection Services and Annual Costs

Contract	Location	DBA Stops	Non-DBA Stops
C003008	Brock	153	45
	Uxbridge	101	
	Scugog	375	
	Clarington	650	
C002459	Ajax	75	101
	Pickering	0	
C002667	Oshawa	160	45
	Whitby	1,247	
TOTAL STOPS		2,761	191
		\$115,750	\$16,725
ESTIMATED ANNUAL COST		\$132,475	

- 6.2 The City of Pickering does not have a DBA identified in contract C002459.
- 6.3 The estimated cost to provide municipal non-hazardous waste, recycling and organics collection services to the small businesses identified in this report is estimated at \$132,475* annually, the costs of which are already included in the collection contracts and financed from the annual Business Plans and Budgets.
- 6.4 The most cost-effective option to ensure that the small businesses identified in this report continue to receive recycling services after the Region's Blue Box program transitions would be for the Region to negotiate with PROs to add these small businesses as an incremental service to their future recycling collection contracts on a cost recovery basis.
- 6.5 Alternatively, while staff do not yet have an estimate, it is anticipated that a dedicated recycling contract to service only the 3,000 small businesses identified in Attachments #1 and #2 would be a considerably higher cost, on a per address basis, than the current contracted cost for providing this service.
- 6.6 Finally, the cost for the one-year extension of Regional Standing Agreement C002459 with Miller Waste is estimated at approximately \$8.5 million annually and will result in a net cost increase of approximately \$0.8 million annually to be funded from the annual Solid Waste Management Business Plans and Budgets.

7. Relationship to Strategic Plan

- 7.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

- a. Goal 1.2 Increase waste diversion and resource recovery.
- b. Goal 5.1 Optimize resources and partnerships to deliver exceptional quality services and value.

8. Conclusion

- 8.1 A one-year extension to Standing Agreement C002459 with Miller Waste for the Curbside Collection of Non-Hazardous Waste, Recyclables and Organics from Residences and Multi-Residential Properties in the City of Pickering and the Town of Ajax for the Region of Durham is necessary to align the expiry date of this agreement with the Region's transition from the Blue Box program.
- 8.2 Upon approval of this report, Regional staff will negotiate with Blue Box PROs and report back on the financial implications of PROs including the recycling services to the Region's small businesses listed in Attachments #1 and #2 of this report into their future recycling contracts, after the Region transitions out of the Blue Box recycling program on July 1, 2024. Staff will also report back on options and recommendations for Council to consider pending failed negotiation with PROs.
- 8.3 Based on Regional Council's direction, staff will either initiate the phase-out of the collection of non-hazardous waste, recyclables and organics in the Townships of Brock, Uxbridge, Scugog, the Municipality of Clarington, the City of Pickering and Town of Ajax and the collection of recyclables in the Town of Whitby and the City of Oshawa for the small businesses listed in Attachment #2 or to formally amend the appropriate standing agreements to include these small businesses on an interim basis until such time as a further recommendation is brought to Council.
- 8.4 This report has been reviewed by the Commissioner of Finance.
- 8.5 For additional information, please contact Gioseph Anello. Director of Waste Management Services, at 905-668-7711, extension 3445.

9. Attachments

Attachment #1: Designated Business Areas by Area Municipality

Attachment #2: Small Business Locations Outside Designated Business Areas
by Area Municipality

Respectfully submitted,

Original signed by:

Susan Siopis, P.Eng.
Commissioner of Works

Recommended for Presentation to Committee

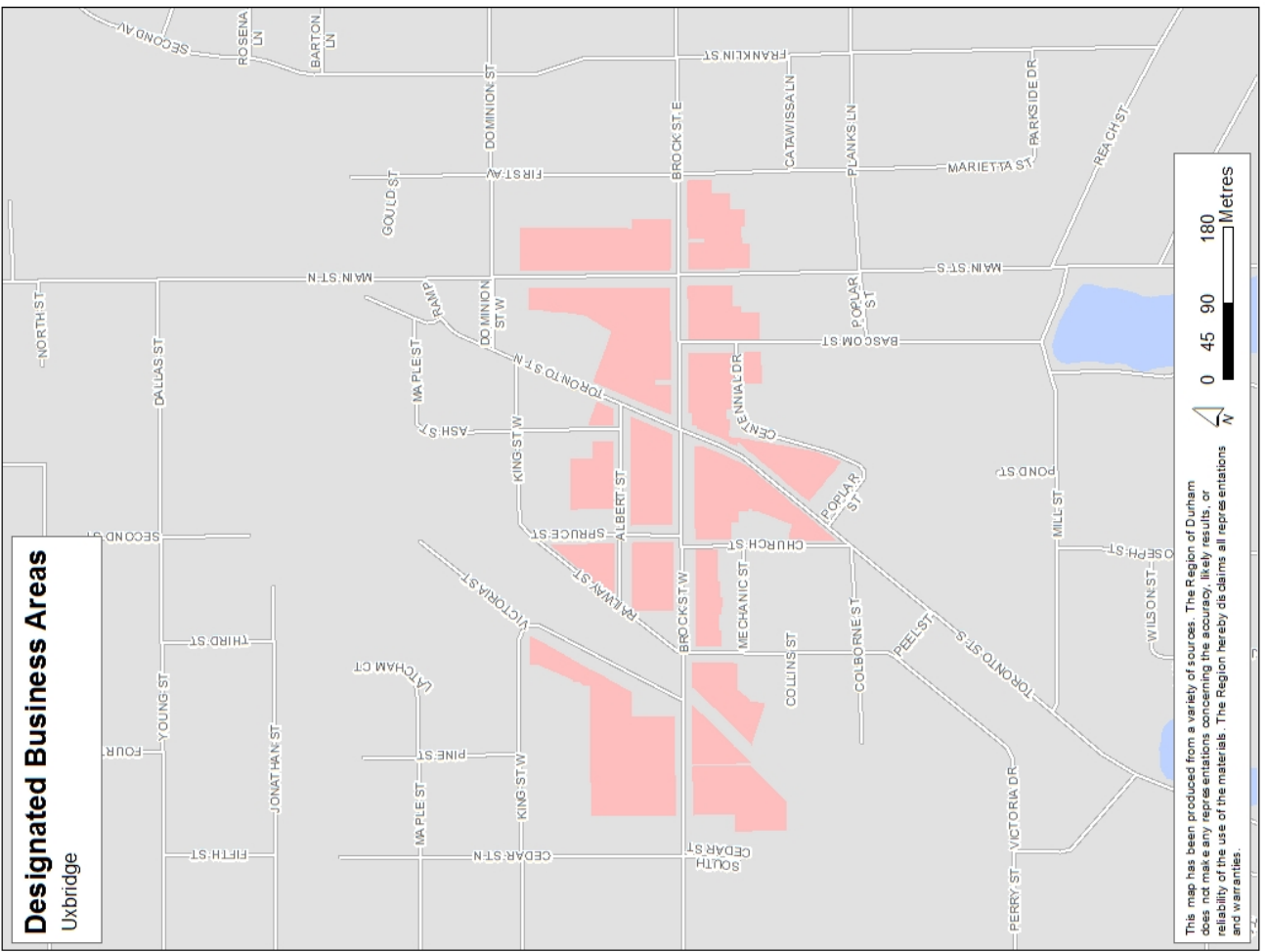
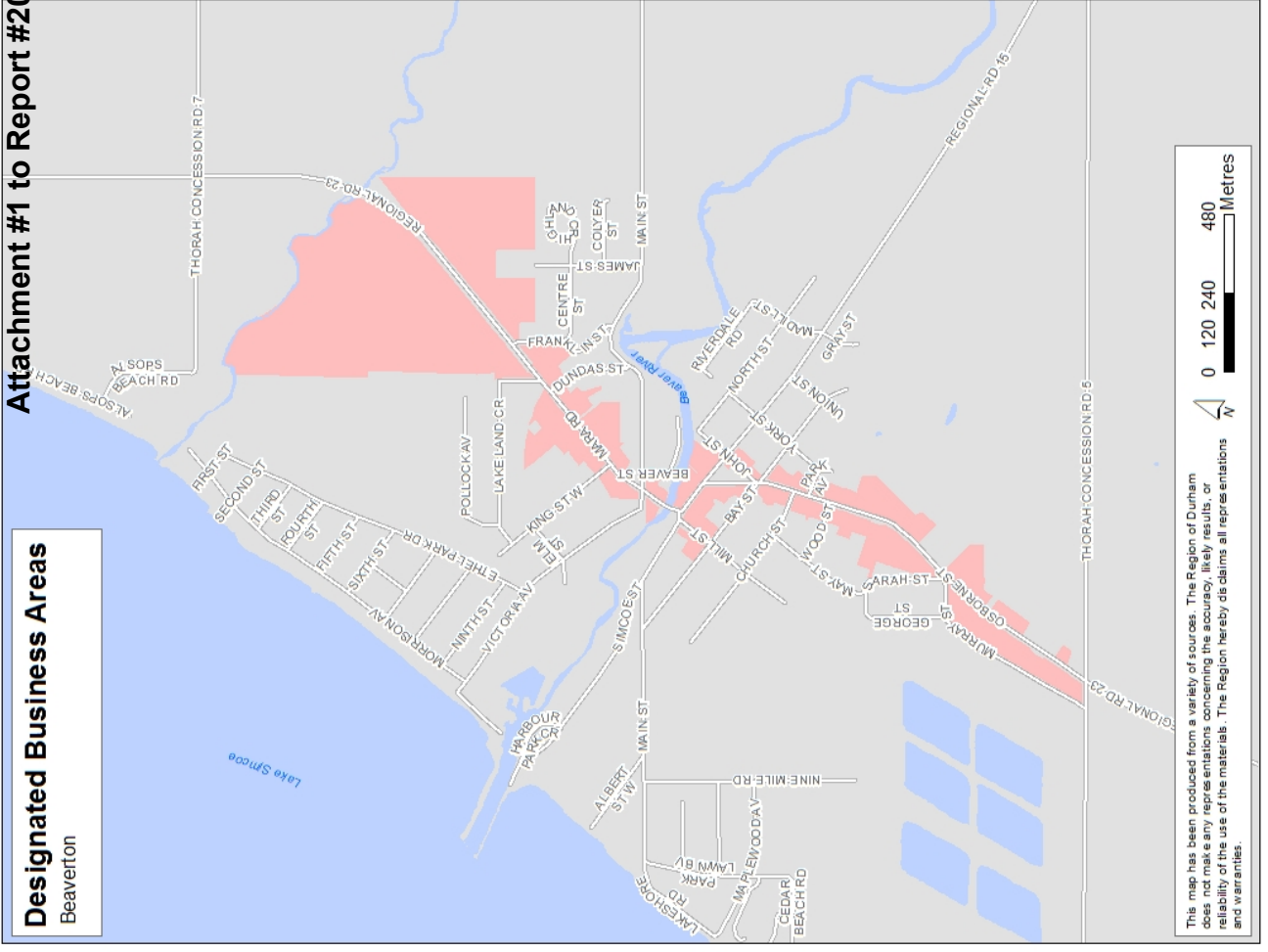
Original signed by:

Elaine Baxter-Trahair
Chief Administrative Officer

Attachment # 1

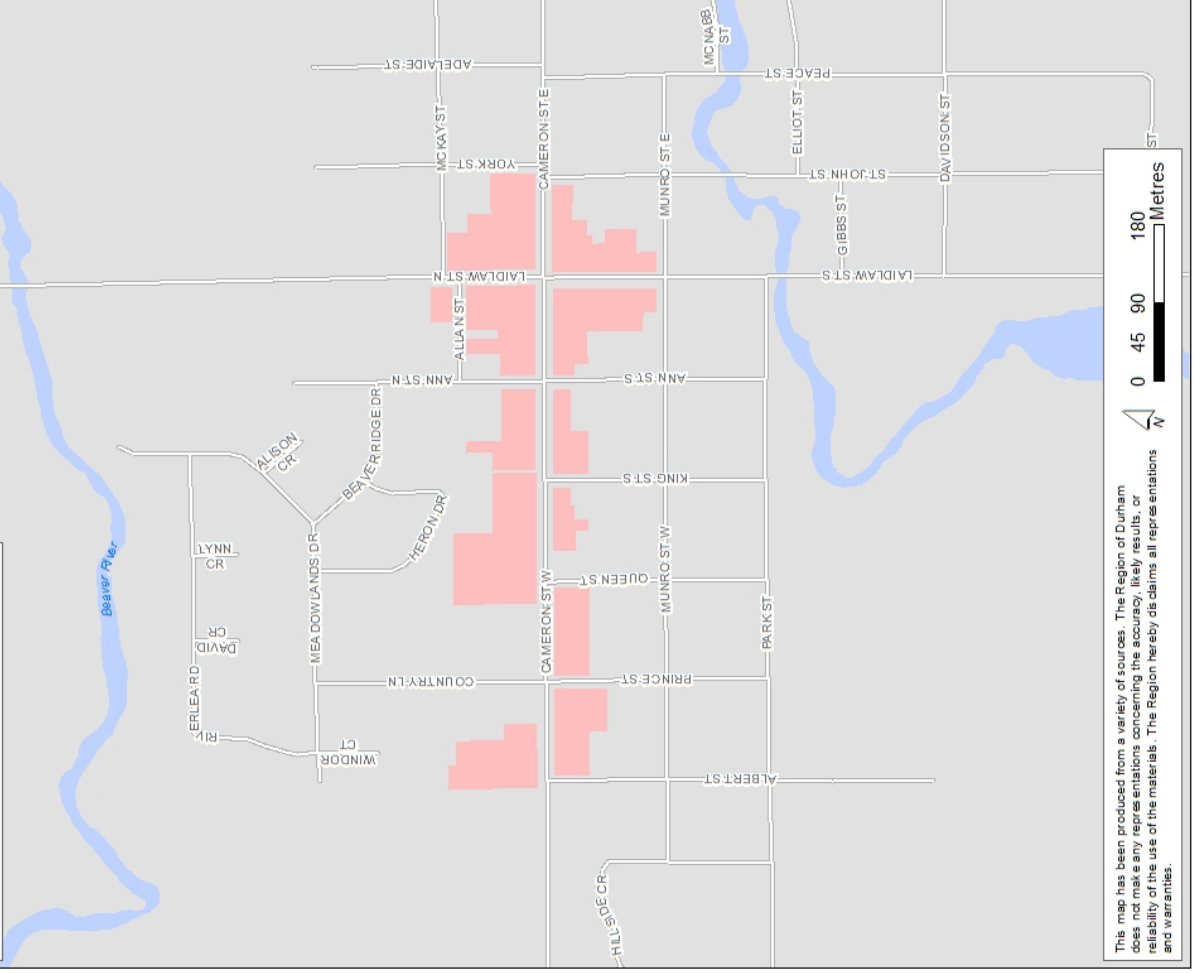
Designated Business Areas

By Area Municipality



Designated Business Areas

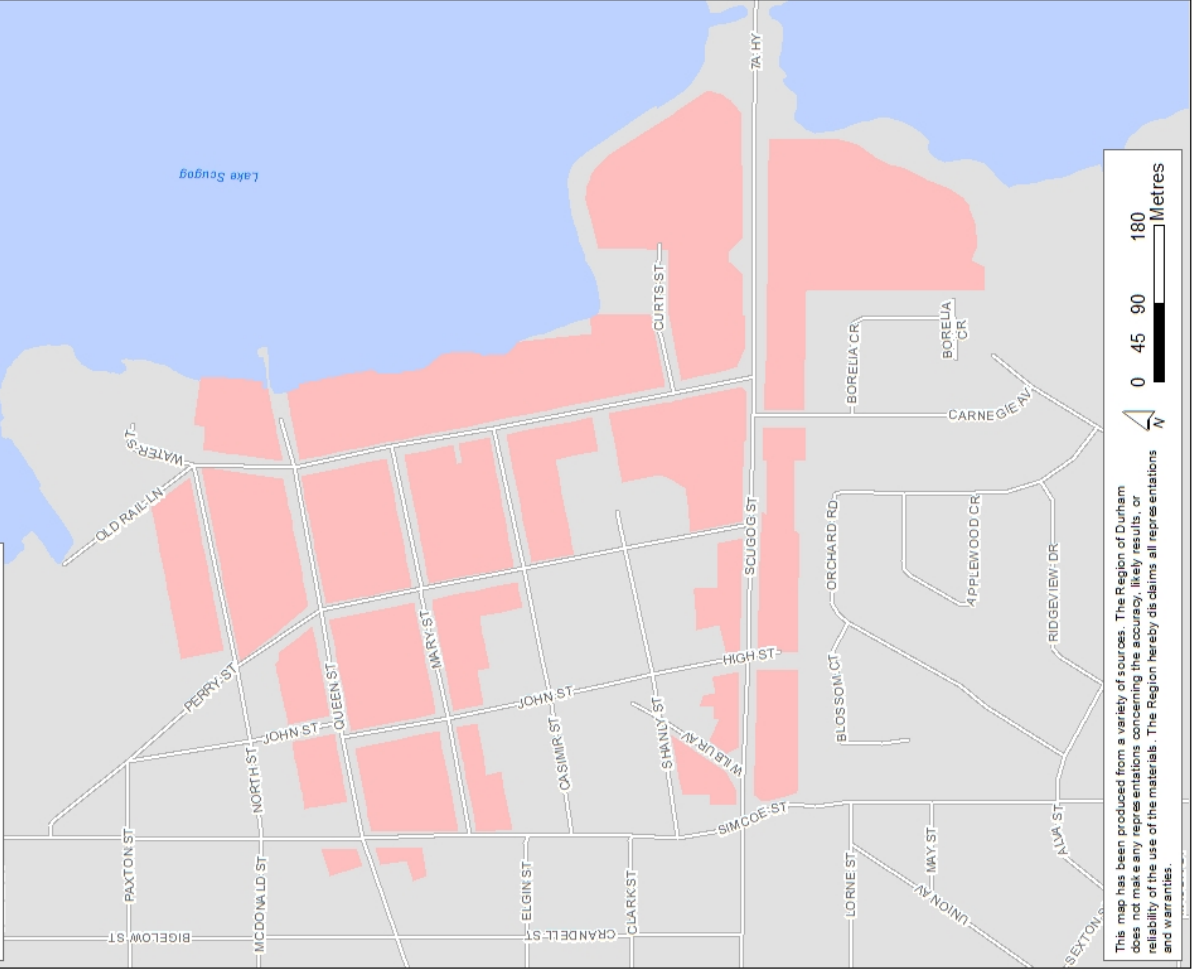
Cannington



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Designated Business Areas

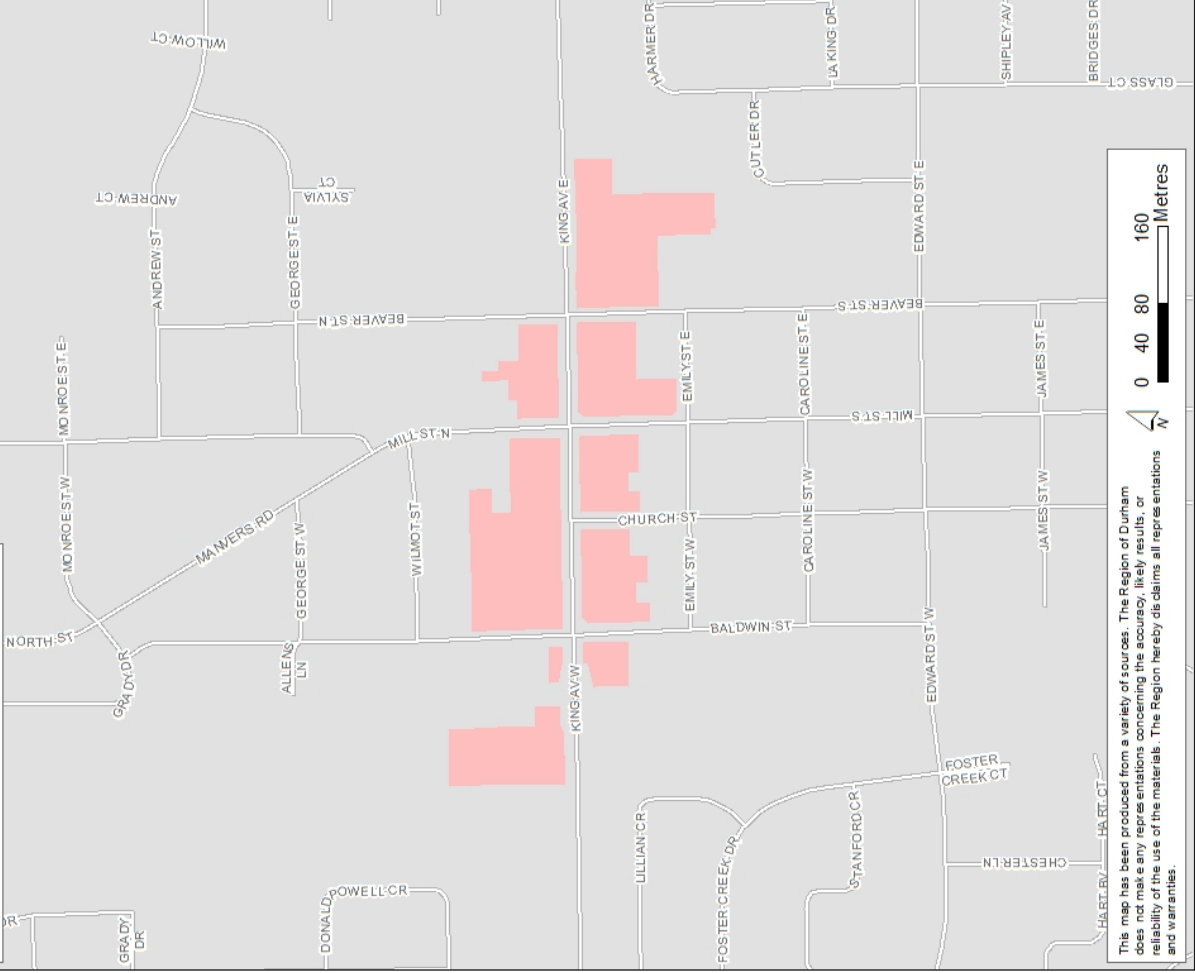
Port Perry



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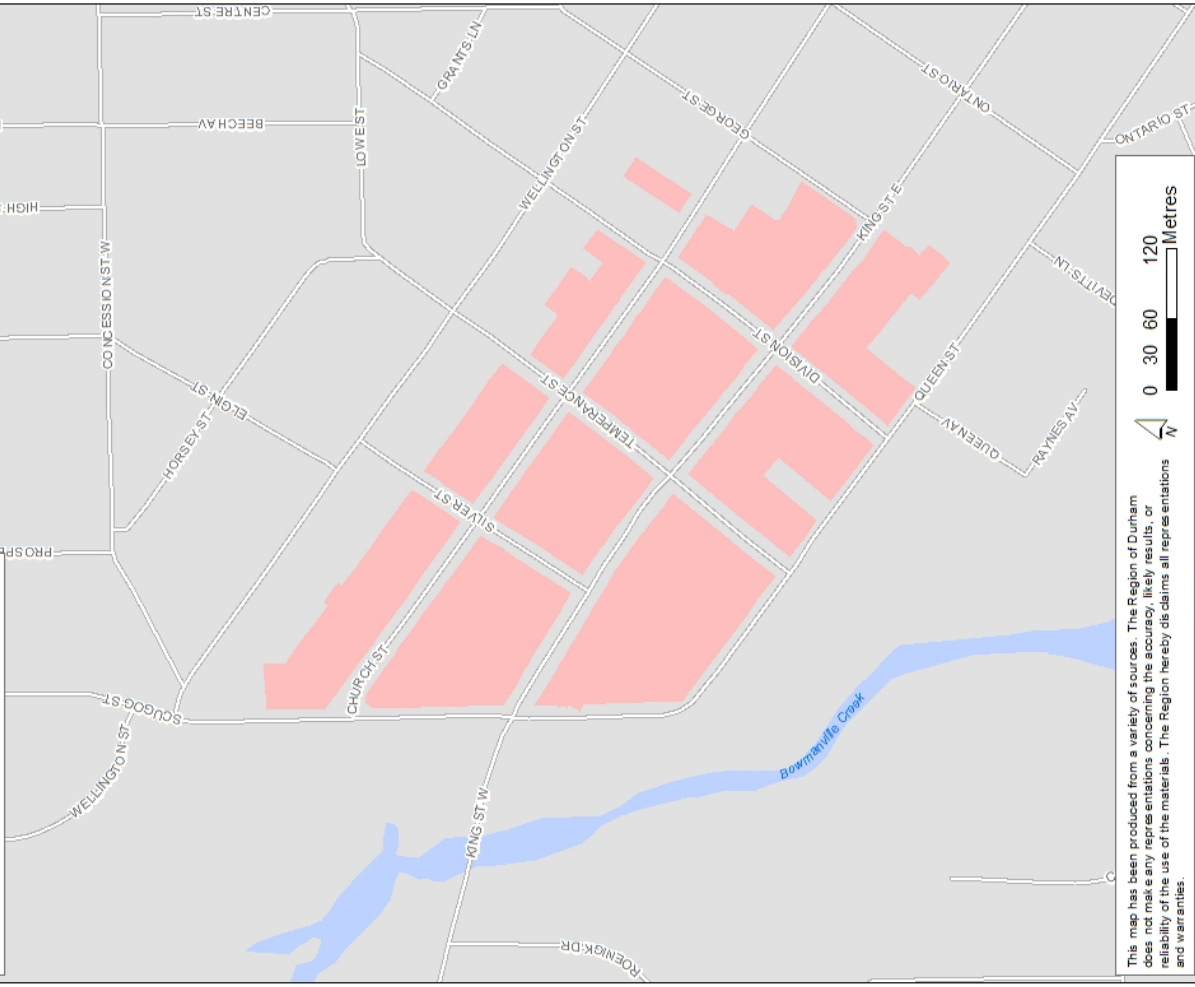
Designated Business Areas

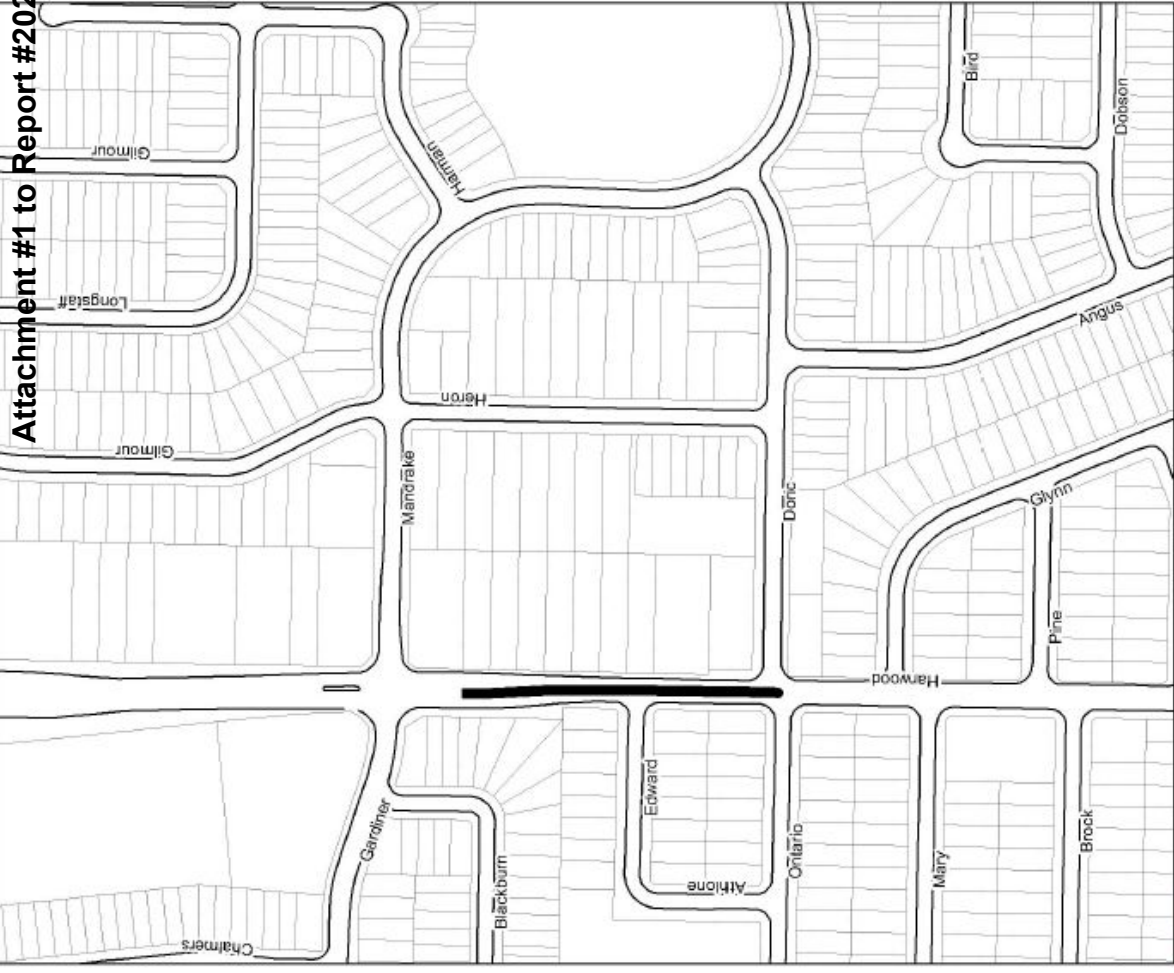
Newcastle



Designated Business Areas

Bowmanville



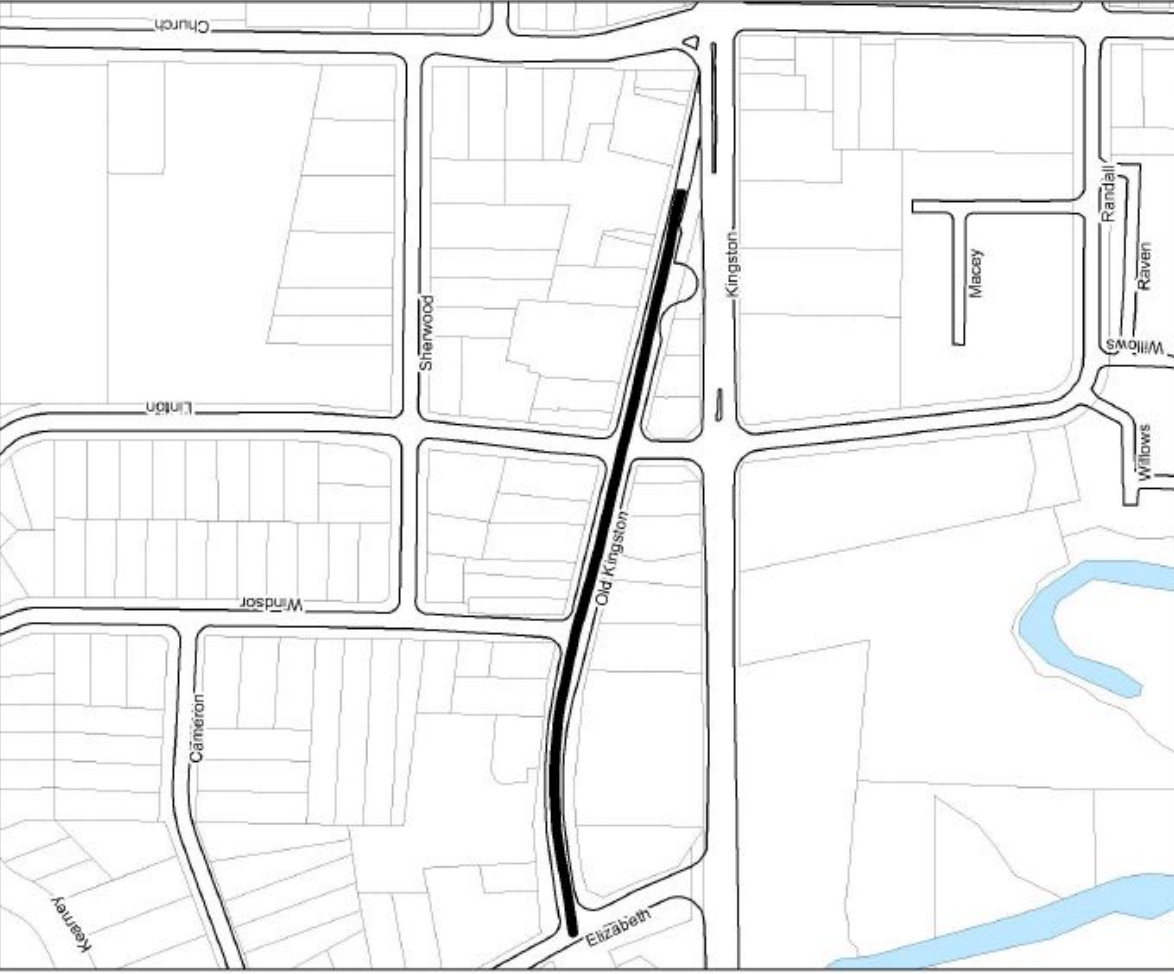


The Regional Municipality of Durham Works Department
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 Source: Regional GIS 03/2022

**Designated Business District
 Ajax**

ATTACHMENT 4

1:2,000



The Regional Municipality of Durham Works Department
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 Source: Regional GIS 03/2022

**Designated Business District
 Ajax (Pickering Village)**

ATTACHMENT 5

1:2,000

TOWN OF WHITBY BIA BOUNDARY

Attachment #1 to Report #2022-WR-2

(Approximate # of Stops 1151)



VILLAGE OF BROOKLIN BIA BOUNDARY

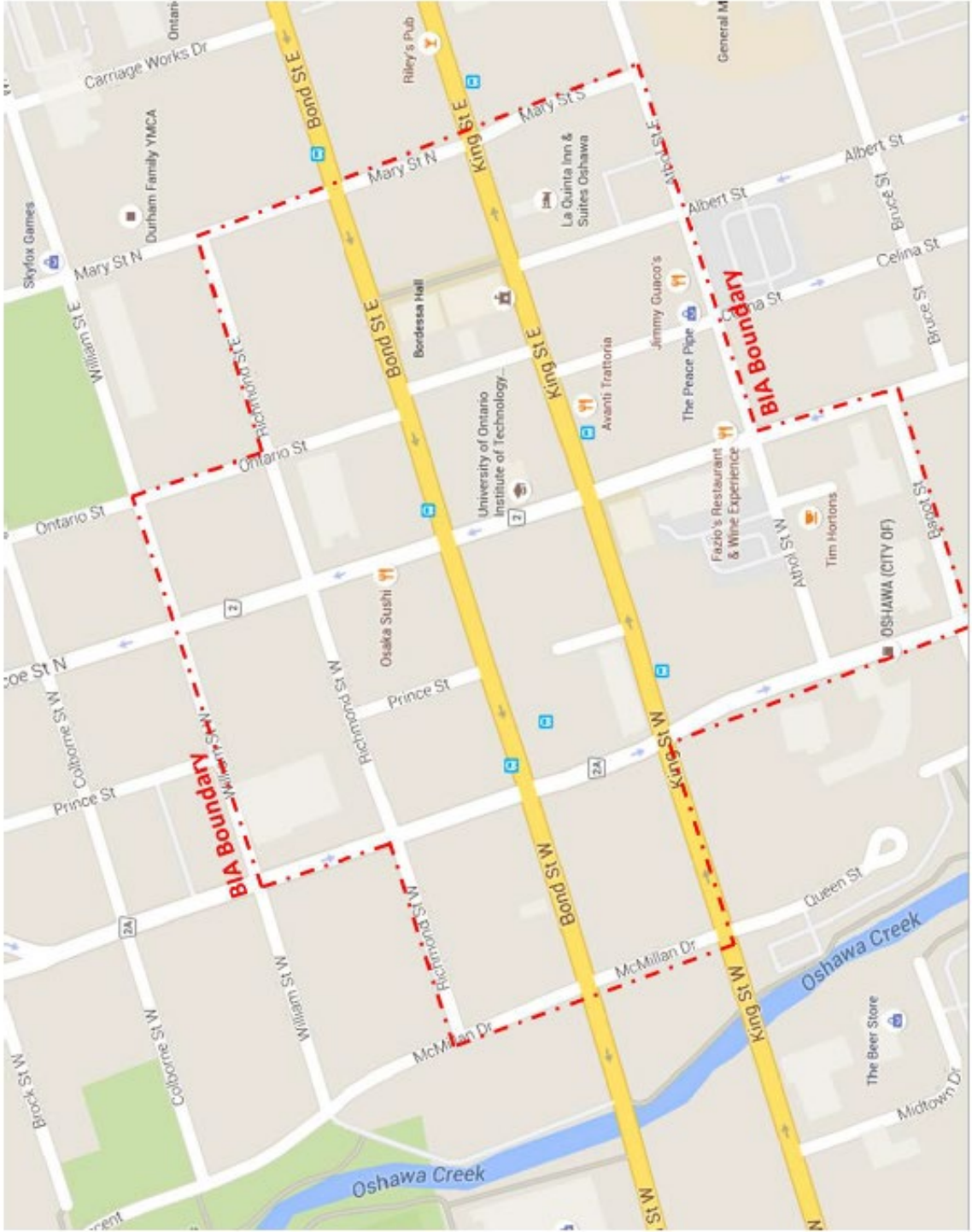
(Approximate No. of Stops 96)



CITY OF OSHAWA BIA BOUNDARY

Attachment #1 to Report #2022-WR-2

(Approximate No. Stops 160)



Civic #	Road Name	Road Type	Direction	Town	Municipality	Property Description
41	Church	Street	South	Ajax	Ajax	Pet Hospital
23	Church	Street	South	Ajax	Ajax	School
15	Church	Street	South	Ajax	Ajax	School
13	Church	Street	South	Ajax	Ajax	Commercial Business
8	Lincoln	Street	South	Ajax	Ajax	Laundry Mat
55	Church	Street	South	Ajax	Ajax	Laundry Mat
837	Riverside	Drive	North	Ajax	Ajax	Golf Course
56	Angus	Drive	North	Ajax	Ajax	Church
300	Church	Street	North	Ajax	Ajax	Church
1030	Ravenscroft	Road	North	Ajax	Ajax	Church
1201	Ravenscroft	Road	North	Ajax	Ajax	Church
1001	Ravenscroft	Road	North	Ajax	Ajax	Church
475	Kingston	Road	East	Ajax	Ajax	Commercial Business
479	Kingston	Road	East	Ajax	Ajax	Commercial Business
527	Kingston	Road	East	Ajax	Ajax	Commercial Business
545	Kingston	Road	East	Ajax	Ajax	Commercial Business
555	Kingston	Road	East	Ajax	Ajax	Commercial Business
567	Kingston	Road	East	Ajax	Ajax	Commercial Business
33	Church	Street	South	Ajax	Ajax	Doctors Office
29	Harwood	Ave	South	Ajax	Ajax	Commercial Business
37	Harwood	Ave	South	Ajax	Ajax	Commercial Business
9	Doric	Street	East	Ajax	Ajax	Pet Hospital
599	Bayly	Street	East	Ajax	Ajax	Church
55	Emperor	Street	East	Ajax	Ajax	Church
97	Burcher	Road	East	Ajax	Ajax	Church
35	Church	Street	North	Ajax	Ajax	Church
77	Randle	Drive	South	Ajax	Ajax	Church
	Church	Street	North	Ajax	Ajax	Commercial Business
	Elizabeth	Street	North	Ajax	Ajax	Commercial Business
92	Orchard	Road	South	Ajax	Ajax	Commercial Business
92A	Orchard	Road	South	Ajax	Ajax	Commercial Business
100	Orchard	Road	South	Ajax	Ajax	Commercial Business
106	Orchard	Road	South	Ajax	Ajax	Commercial Business
134	Orchard	Road	South	Ajax	Ajax	Commercial Business
66	Church	Street	South	Ajax	Ajax	Commercial Business
68	Church	Street	South	Ajax	Ajax	Commercial Business
448	Kingston	Road	West	Ajax	Ajax	Commercial Business
504	Kingston	Road	West	Ajax	Ajax	Commercial Business
510	Kingston	Road	West	Ajax	Ajax	Commercial Business
516	Kingston	Road	West	Ajax	Ajax	Commercial Business
530	Kingston	Road	West	Ajax	Ajax	Commercial Business
556	Kingston	Road	West	Ajax	Ajax	Commercial Business
560	Kingston	Road	West	Ajax	Ajax	Commercial Business
586	Kingston	Road	West	Ajax	Ajax	Commercial Business
310	Kingston	Road	West	Ajax	Ajax	Pet Kennel

B23005	Lake Ridge	Road	Port Bolster	Brock	Commercial Business
360	Osborne	Street	Beaverton	Brock	Commercial Business
336	Osborne	Street	Beaverton	Brock	Auto Body
472	Osborne	Street	Beaverton	Brock	Commercial Business
2271	Hwy 2	Road	Bowmanville	Clarington	Wellness Clinic
1685	Bloor	Street	Courtice	Clarington	Church
1696	Bloor	Street	Courtice	Clarington	Flea Market
1731	Bloor	Street	Courtice	Clarington	Church
1669	Courtice	Road	Courtice	Clarington	Church
1518	Nash	Road	Courtice	Clarington	Church
4830	Trulls	Road	Courtice	Clarington	Church
1648	Taunton	Road	Mitchals Corners	Clarington	Commercial Business
1967	Taunton	Road	Mitchals Corners	Clarington	Food Trucks
1975	Taunton	Road	Hampton	Clarington	Commercial Business
2212	Taunton	Road	Hampton	Clarington	Commercial Business
5454	Old Scugog	Road	Hampton	Clarington	Church
5480	Old Scugog	Road	Hampton	Clarington	Commercial Business
7851	Old Scugog	Road	Hampton	Clarington	Commercial Business
2486	Concession 6	Road	Hayden	Clarington	Garage
6742	Newtonville	Road	Kendal	Clarington	School
732	King	Street E	Newcastle	Clarington	Commercial Business
4502	Hwy 2	Road	Newtonville	Clarington	Commercial Business
4532	Hwy 2	Road	Newtonville	Clarington	Heritage Building
713/721	Krosno	Boulevard	Pickering	Pickering	Commercial Business
776	Liverpool	Road	Pickering	Pickering	Commercial Business
927	Liverpool	Road	Pickering	Pickering	Dentist
925	Liverpool	Road	Pickering	Pickering	Commercial Business
1866	Liverpool	Road	Pickering	Pickering	Millennium City Veterinary Hospital
159	Twyn Rivers	Drive	Pickering	Pickering	Commercial Business
1880	Altona	Road	Pickering	Pickering	Altona Auto Services Inc.
1396	Kingston	Road	Pickering	Pickering	Sheridan Veterinary Services
1234	Kingston	Road	Pickering	Pickering	Commercial Business
1192	Kingston	Road	Pickering	Pickering	Commercial Business
1414	Rosebank	Road	Pickering	Pickering	Rosebank Animal Hospital
1	Evelyn	Avenue	Pickering	Pickering	Commercial Business
1995	Valley Farm	Road	Pickering	Pickering	Day Care & Nursery School
1999	Fairport	Road	Pickering	Pickering	Church
755	Oklahoma	Road	Pickering	Pickering	Church
796	Eyer	Drive	Pickering	Pickering	Church
1066	Dunbarton	Road	Pickering	Pickering	Daycare

1115	Finch Avenue	Pickering	Pickering	Fire Station
2145	Brock Road	Pickering	Pickering	Church
5067	Old Brock Road	Claremont	Pickering	Daycare
4941	Old Brock Road	Claremont	Pickering	Fire Station
5014	Old Brock Road	Claremont	Pickering	Claremont Pharmacy
5006	Old Brock Road	Claremont	Pickering	Full-Service Maintenance
1703	Central Street	Claremont	Pickering	Claremont General Store/Beer & LCBO
1716	Central Street	Claremont	Pickering	Commercial Business
5077	Old Brock Road	Claremont	Pickering	Commercial Business
1749	Hoxton Street	Claremont	Pickering	Commercial Business
3280	Highway 7	Pickering	Pickering	Commercial Business
3325	Highway 7	Pickering	Pickering	Commercial Business
1884	Altona Road	Pickering	Pickering	Kennel
1688	Highway 7	Pickering	Pickering	School
1686	Highway 7	Pickering	Pickering	City of Pickering Animal Services
1709	Highway 7	Pickering	Pickering	Commercial Business
3633	Broughham Road	Pickering	Pickering	Commercial Business
931	Liverpool Road	Pickering	Pickering	Commercial Business
933	Liverpool Road	Pickering	Pickering	Commercial Business
1920	Bayly Street	Pickering	Pickering	Commercial Business
553	Kingston Road	Pickering	Pickering	Church
2250	Concession 8	Pickering	Pickering	Fire Station
2005	Concession 9	Pickering	Pickering	Commercial Business
3000	Concession 8	Pickering	Pickering	Veterinary Services
3735	Sideline 16	Pickering	Pickering	Church
3470	Salem Road	Pickering	Pickering	Commercial Business
1010	Toy Avenue	Pickering	Pickering	Golf Course
1016	Toy Avenue	Pickering	Pickering	Commercial Business
1020	Toy Avenue	Pickering	Pickering	Commercial Business
1035	Toy Avenue	Pickering	Pickering	Commercial Business
1033	Toy Avenue	Pickering	Pickering	Commercial Business
1031	Toy Avenue	Pickering	Pickering	Commercial Business
1029	Toy Avenue	Pickering	Pickering	Commercial Business
1600	Alliance Avenue	Pickering	Pickering	Commercial Business
1730	McPherson Court	Pickering	Pickering	Commercial Business
1016	Brock Road	Pickering	Pickering	Commercial Business
340	Kingston Road	Pickering	Pickering	Commercial Business
14020	old scugog Road	Blackstock	Scugog	Mechanic Shop & Gas Station
14004	old scugog Road	Blackstock	Scugog	Commercial Business
3741	ON-7A highway	Nestleton Station	Scugog	Commercial Business
3990	ON-7A highway	Nestleton Station	Scugog	Commercial Business
3991	Proutt Road	Nestleton Station	Scugog	Commercial Business
5	Pier Street	Cesarea	Scugog	Church
3550	RR 57 Road	Cesarea	Scugog	Commercial Business
1595	ON-7A highway	Port Perry	Scugog	Fire Station
				Commercial Business

Attachment #2 Small Business Locations Outside Designated Business Areas

30	crandell	Street		Port Perry	Scugog	Fire Station
16121	Island	Road		Port Perry	Scugog	Commercial Business
19990	7 & 12	highway		Greenbank	Scugog	Commercial Business
19980	7 & 12	highway		Greenbank	Scugog	Commercial Business
3490	ON-7A	highway		Blackstock	Scugog	Commercial Business
3976	ON-7A	highway		Nestleton Station	Scugog	Auto Service
4299	ON-7A	highway		Nestleton Station	Scugog	Commercial Business
4697	concession road 3	road		Goodwood	Uxbridge	Commercial Business
182	main	Street	North	Uxbridge	Uxbridge	Gas Station
124	Main	street	North	Uxbridge	Uxbridge	Commercial Business
106	Main	Street	North	Uxbridge	Uxbridge	Commercial Business
102	main	Street	North	Uxbridge	Uxbridge	Pet Hospital
120	Toronto	Street	South	Uxbridge	Uxbridge	Dentist
159	Main	Street	North	Uxbridge	Uxbridge	Commercial Business
950	Taunton	Road	East	Whitby	Whitby	Animal Hospital
7	Cassels	Rd	West	Whitby	Whitby	Orthodontist
10	Cassels	Rd	West	Whitby	Whitby	Commercial Business
4	Cassels	Rd	West	Whitby	Whitby	Commercial Business
6745	Baldwin	St	North	Whitby	Whitby	Fire Station
300	Garrard	Rd	South	Whitby	Whitby	Church
221	Garrard	Rd	South	Whitby	Whitby	Church
113	Garrard	Rd	South	Whitby	Whitby	Dental Care
14	Garrard	Rd	North	Whitby	Whitby	Commercial Business
1850	Rossland	Rd	West	Whitby	Whitby	Church
1600	Manning	Rd	East	Whitby	Whitby	Fire Station
287	Dean	Avenue		Oshawa	Oshawa	Commercial Business
215	Toronto	Avenue		Oshawa	Oshawa	Commercial Business
464	Ritson	Road	South	Oshawa	Oshawa	Church
744	Simcoe	Street	South	Oshawa	Oshawa	Commercial Business
792	Simcoe	Street	South	Oshawa	Oshawa	Auto Service
804	Simcoe	Street	South	Oshawa	Oshawa	Commercial Business
808	Simcoe	Street	South	Oshawa	Oshawa	Commercial Business
1076	Cedar	Street	South	Oshawa	Oshawa	Strip Plaza
374, 368, 366	Wilson	Road	South	Oshawa	Oshawa	Strip Plaza
100	Nonquon	Road	South	Oshawa	Oshawa	Commercial Business
918	Taunton	Road	West	Oshawa	Oshawa	Commercial Business
370	Wilson Rd S	STREET	SOUTH	Oshawa	Oshawa	Strip Plaza
320	VIOLA	STREET	SOUTH	Oshawa	Oshawa	Commercial Business
1160	SIMCOE	STREET	SOUTH	Oshawa	Oshawa	Strip Plaza
40	WELLINGTON	STREET	EAST	Oshawa	Oshawa	Commercial Business
996	FAREWELL	STREET	EAST	Oshawa	Oshawa	Commercial Business
575	WENTWORTH	STREET	EAST	Oshawa	Oshawa	Commercial Business
242	BLOOR	Street	EAST	Oshawa	Oshawa	Strip Plaza

110	BLOOR	Street	EAST	Oshawa	Oshawa	Auto Body
168	BLOOR	Street	WEST	Oshawa	Oshawa	Commercial Business
634	PARK	ROAD	SOUTH	Oshawa	Oshawa	Commercial Business
274	BLOOR	Street	WEST	Oshawa	Oshawa	Commercial Business
631	MONTRAVE	AVENUE		Oshawa	Oshawa	Commercial Business
534	CUBERT	Street		Oshawa	Oshawa	Commercial Business
389	SDEAN	AVENUE		Oshawa	Oshawa	Commercial Business
95	CLARENCE BIESENTHAL	DRIVE		Oshawa	Oshawa	Commercial Business
333	RITSON	ROAD	SOUTH	Oshawa	Oshawa	Commercial Business
302	OSHAWA	BLVD	SOUTH	Oshawa	Oshawa	Commercial Business
690	KING	Street	EAST	Oshawa	Oshawa	Church
409	ADELAIDE	AVENUE	EAST	Oshawa	Oshawa	Church
328	RITSON	ROAD	North	Oshawa	Oshawa	Lumber Yard
166	ADELAIDE	AVENUE	EAST	Oshawa	Oshawa	Commercial Business
82	ADELAIDE	AVENUE	EAST	Oshawa	Oshawa	Commercial Business
293	MARY	Street	North	Oshawa	Oshawa	Commercial Business
152	PARK	ROAD	SOUTH	Oshawa	Oshawa	Commercial Business
684	HORTOP	Street		Oshawa	Oshawa	Commercial Business
902	SIMCOE	STREET	North	Oshawa	Oshawa	Strip Plaza
1450	RITSON	ROAD	North	Oshawa	Oshawa	Commercial Business
370	TAUNTON	ROAD	EAST	Oshawa	Oshawa	Commercial Business
25	Grenfell	Street		Oshawa	Oshawa	Auto Body
184	Park	Road		Oshawa	Oshawa	Commercial Business

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: The Works Committee
From: Commissioner of Works
Report: #2022-W-14
Date: March 2, 2022

Subject:

The Regional Municipality of Durham's Drinking Water Systems 2021 Summary Report

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That the 2021 Summary Report for the Regional Municipality of Durham's Drinking Water Systems be received for information;
 - B) That receipt of this report be confirmed by resolution of Regional Council; and
 - C) That a copy of this resolution be forwarded to the Ontario Ministry of the Environment, Conservation and Parks' York-Durham District Office to indicate the conditions of Schedule 22 of Ontario Regulation 170/03 have been fulfilled.
-

Report:

1. Purpose

- 1.1 The Regional Municipality of Durham (Region) is required to prepare a Summary Report for each of the municipal drinking water systems under Ontario Regulation (O.Reg.) 170/03 of the Safe Drinking Water Act (SDWA). The Summary Report is to be completed and submitted to Regional Council prior to March 31 of each year.

2. Summary Report

2.1 Schedule 22 of O.Reg. 170/03 requires that a Summary Report provide the following information:

- 22-2. (1) The owner of a drinking water system shall ensure that, not later than March 31 of each year after 2003, a report is prepared in accordance with subsections (2) and (3) for the preceding calendar year and is given to,
- (a) In the case of a drinking water system owned by a municipality, the members of the municipal council;
 - (b) In the case of a drinking water system owned by a municipal service board established under section 195 of the Municipal Act 2001, the members of the municipal service board; or
 - (c) In the case of a drinking water system owned by a corporation, the board of directors of the corporation.
- 22-2. (2) The report must,
- (a) List the requirements of the Act, the regulations, the system's approval, drinking water works permit, municipal drinking water licence, and any orders applicable to the system that were not met at any time during the period covered by the report; and
 - (b) For each requirement referred to in clause (a) that was not met, specify the duration of the failure and the measures that were taken to correct the failure.
- 22-2. (3) The report must also include the following information for the purpose of enabling the owner of the system to assess the capability of the system to meet existing and planned uses of the system:
- 1. A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows.
 - 2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water license, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5 (4), to the flow rates specified in the written agreement.

22-2. (4) If a report is prepared under subsection (1) for a system that supplies water to a municipality under the terms of a contract, the owner of the system shall give a copy of the report to the municipality by March 31.

2.2 Table 1 below provides a list of all Drinking Water Systems (DWS) and their Municipal Drinking Water Licences for the period from January 1, 2021 to December 31, 2021.

Table 1

Drinking Water System	Municipal Drinking Water Licence #	Issue Number	Issue Date
Oshawa *	003-111	7	September 23, 2020
Whitby *	003-111	7	September 23, 2020
Ajax *	003-111	7	September 23, 2020
Beaverton	003-107	4	November 15, 2019
Blackstock	003-101	4	November 15, 2019
Bowmanville	003-103	5	September 23, 2020
Cannington	003-106	4	November 15, 2019
Greenbank	003-104	4	November 15, 2019
Newcastle	003-109	7	September 23, 2020
Orono	003-108	5	November 15, 2019
Port Perry	003-102	4	November 15, 2019
Sunderland	003-110	4	November 15, 2019
Uxbridge	003-105	7	November 15, 2019

*Oshawa, Whitby and Ajax are licenced as one system. For the purposes of this report these DWS are listed individually.

- 2.3 Table 2 below provides a summary of compliance for each DWS with the prescribed conditions of Schedule 22 of O.Reg. 170/03.

Table 2

Drinking Water System	Compliance Requirements	Water Taking Conditions
Oshawa *	Non-Compliant	Did Not Exceed
Whitby *	Compliant	Did Not Exceed
Ajax *	Non-Compliant	Did Not Exceed
Beaverton	Compliant	Did Not Exceed
Blackstock	Compliant	Did Not Exceed
Bowmanville	Compliant	Did Not Exceed
Cannington	Compliant	Did Not Exceed
Greenbank	Compliant	Did Not Exceed
Newcastle	Compliant	Did Not Exceed
Orono	Compliant	Did Not Exceed
Port Perry	Compliant	Did Not Exceed
Sunderland	Compliant	Did Not Exceed
Uxbridge	Compliant	Did Not Exceed

*Oshawa, Whitby and Ajax are licenced as one system. For the purposes of this report these DWS are listed individually.

- 2.4 The DWS supplying water to the Uxbridge Industrial Park (Uxville) is not required to be covered by this report as it is regulated by the Ministry of Health and Long-Term Care, under O. Reg. 319/08.

3. General Overview of Compliance Status

- 3.1 The Summary Report requires a review of each DWS with respect to the SDWA, Permit to Take Water (PTTW), Municipal Drinking Water Licence (MDWL), Drinking Water Works Permit (DWWP), Ministry of the Environment, Conservation and Parks (MECP) inspections and orders including to provide an explanation of any non-compliance issues that were identified during the reporting period.
- 3.1 Water quality monitoring data is available on the Region of Durham's website at www.durham.ca
- 3.2 The Drinking Water Quality Management Standard (DWQMS) Element 20 requires that the results of the annual management review meeting, the identified deficiencies, decisions, and action items are reported to the Owner. The annual DWQMS Management Review meeting was held on June 17, 2021. Attending the meeting were staff that are identified in the Operational Plan as being part of the top management team. The meeting reviewed the agenda items that are listed in the DWQMS 2.0, Element 20. There were some action items identified during the meeting to complete the standard operating procedure for the Groundwater Summary Report follow up. There was one internal audit completed on September 17 to 23, 2021. The results were satisfactory.
- 3.3 The Region is also required, as part of accreditation to the DWQMS, to have an external audit of the management system done by an approved registrar. The 2021 audit was completed on October 4, 2021 and November 1 to 4, 2021. This audit found no non-conformances to the DWQMS and nine opportunities for improvement which are being responded to by the DWS staff.
- 3.4 The full minutes of the management review meeting and the final audit reports for both the internal and external audits are available from the IMS Coordinator. Please contact janine.deboer@durham.ca for more information.

4. Specific Compliance Items

- 4.1 A review indicated that all the DWS met all compliance requirements of O. Reg. 170/03 with the following exceptions:
- a. O. Reg. 170/03 Schedule 16-5 – Continuous Monitoring

Ajax DWS

- On October 22, 2020, the continuous analyzer measuring the free chlorine residual for the Brock Road Reservoir fell below the minimum required level of 0.05 mg/L for approximately six minutes.
- The Region's guidance document did not specify a minimum reportable level for the chlorine residual analyzers measuring the free chlorine residual entering a reservoir in the distribution system.
- The Region will update the guidance document to clarify that all continuous analyzers measuring reservoir inlet residuals have a minimum reportable residual of less than 0.05mg/L and in addition, provide staff training.

Oshawa DWS

- On May 26th, 2021, a chlorine analyzer was switched to “calibration mode” and not switched back to “read mode”. During this time, the analyzer was not monitoring and recording the free chlorine residual required to achieve primary disinfection at Oshawa WSP Plant 1. Operators used a downstream analyzer to verify the free chlorine residual leaving the WSP was within the normal range throughout the event.
- All current analyzers are set up to automatically switch over to “read mode” if accidentally left in “calibration mode”. To prevent a re-occurrence of this event, the Region will ensure that new analyzers are set up the same way.

b. Best Management Practices**Ajax DWS**

- The Westney Road Reservoir and Re-chlorination Facility underwent upgrades which introduced new operational procedures that were not incorporated into the operations manual.
- The Region will update the manual to include these operation and maintenance procedures. Training will be completed prior to the commencement of the re-chlorination season in the spring 2022.

Oshawa DWS

- Throughout 2021, there were instances of coagulant outages lasting less than five minutes in duration that were not reported to the MECP. Failure to report these interruptions in coagulant feed, regardless of their duration, are incidents of non-conformance to the MECP's *Procedure of Disinfection of Drinking Water in Ontario* filter performance criteria. These instances are required to be reported under Section 16-4 of O. Reg. 170/03 as observations of inadequately disinfected water being directed to users.
- The Region will plan to apply for regulatory relief from having to report coagulant interruptions of short durations. Until regulatory relief has been granted, all coagulant outages will be reported, and the annual training will remind operators of this obligation.

5. Summary of Water Flows

- 5.1 DWS Capacity and Water Flow Data are provided in Attachment #1 as summary charts. Each summary chart provides the monthly average and maximum daily flow for the reporting period. Some of the flow data in Attachment #1 has been pro-rated. Pro-rating is used to determine the volume of water pumped over a 24-hour period. Pro-rated data is indicated in the chart headings.

6. Public Notification and Information

- 6.1 The Summary Report is available on the Region's website at www.durham.ca.

7. Relationship to Strategic Plan

- 7.1 This report aligns with the following strategic goals and priorities in the Region's Strategic Plan namely:
- a. Goal 1: Environmental Sustainability
 - b. Goal 2: Community Vitality
 - c. Goal 3: Economic Prosperity
 - d. Goal 4: Social Investment
 - e. Goal 5: Service Excellence

8. Conclusion

- 8.1 As required under Ontario Regulation 170/03, the Summary Report for the Regional Municipality of Durham's Drinking Water Systems is provided to

Regional Council. It is recommended that receipt of this report be confirmed by the resolution of Regional Council to meet this condition and that a copy of the resolution is forwarded to the Ministry of the Environment, Conservation and Parks.

8.2 For additional information, contact: Tavis Nimmo, Acting Manager, Technical Support Division, at 905-668-7711, extension 3737.

9. Attachment

Attachment #1: Drinking Water System Capacity and Water Flow Data

Respectfully submitted,

Original signed by:

Susan Siopis
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer

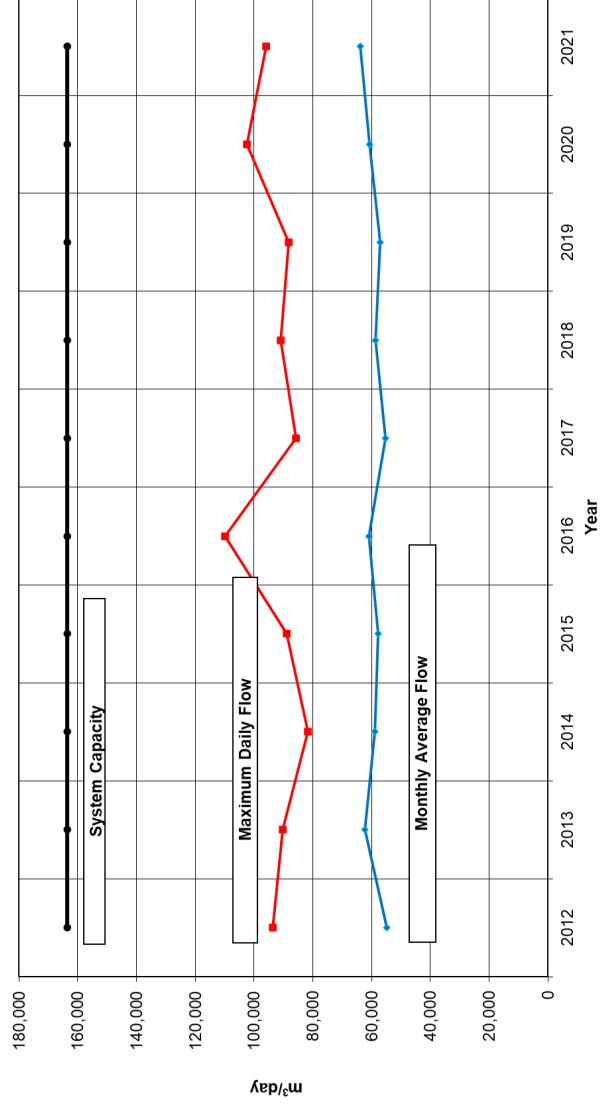
**The Regional Municipality of Durham
Ajax Drinking Water System
2021 Flow Data – Raw and Treated Water**

Month	Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day)	Raw Water Maximum Daily Flow (m ³ /day)	Total Raw Water Flow (m ³)	Treated Water Monthly Average Flow (m ³ /day)	Treated Water Maximum Daily Flow (m ³ /day)	Total Treated Water Flow (m ³)
January	56,028	67,228	1,736,872	55,315	67,636	1,714,766
February	61,632	71,997	1,725,687	60,521	70,856	1,694,583
March	61,202	80,947	1,897,252	60,396	79,622	1,872,285
April	59,660	77,468	1,789,794	57,942	75,816	1,738,272
May	71,137	88,449	2,205,233	67,718	86,302	2,099,252
June	80,551	99,385	2,416,534	75,265	95,933	2,257,955
July	70,569	82,627	2,187,644	67,713	81,111	2,082,377
August	78,400	91,046	2,430,396	76,730	88,068	2,378,624
September	71,048	88,375	2,131,441	67,942	87,644	2,038,270
October	63,508	76,070	1,968,739	60,667	74,204	1,880,670
November	59,475	79,131	1,784,258	56,777	77,479	1,703,303
December	62,698	87,017	1,943,643	60,288	88,590	1,868,934
Annual Total			24,217,493			23,329,291
Maximum		99,385			95,933	
Average	66,326			63,940		
% Capacity		58			59	
Permit to Take Water Limit		170,000				
Municipal Drinking Water Licence Limit					163,500	

The Regional Municipality of Durham Ajax Drinking Water System Capacity and Treated Water Flow Data

Year	Monthly Average Flow Cubic Metres per Day (m ³ /day)	Maximum Daily Flow (m ³ /day)	System Capacity (m ³ /day)
2012	54,910	93,551	163,500
2013	62,300	90,229	163,500
2014	58,867	81,640	163,500
2015	57,883	88,945	163,500
2016	60,997	109,869	163,500
2017	55,247	85,808	163,500
2018	58,808	91,039	163,500
2019	57,175	88,253	163,500
2020	60,682	102,507	163,500
2021	63,940	95,933	163,500

45 **Ajax Drinking Water System Capacity and Treated Water Flow Graph**



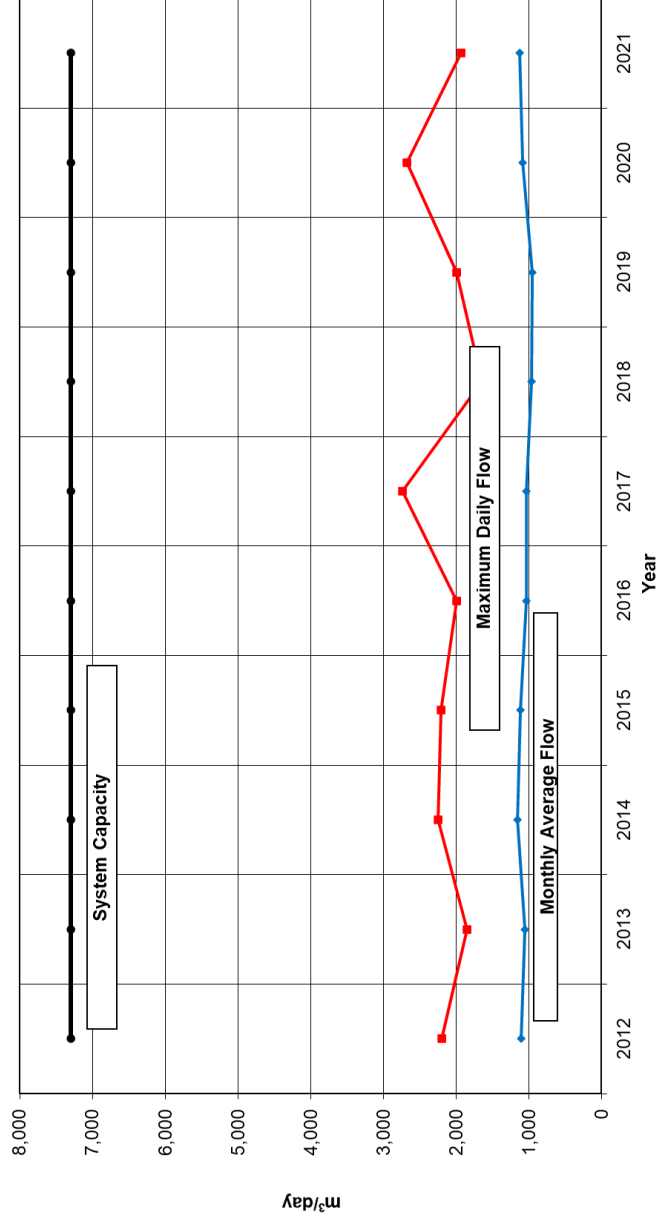
The Regional Municipality of Durham
 Beaverton Drinking Water System
 2021 Flow Data – Raw and Treated Water

Month	Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Total Raw Water Flow (m ³)	Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Total Treated Water Flow (m ³)
January	1,170	1,523	36,293	1,086	1,418	33,590
February	1,172	1,428	32,913	1,106	1,282	31,042
March	1,259	1,547	39,241	1,143	1,488	35,583
April	1,157	1,303	34,692	1,006	1,166	30,112
May	1,369	1,711	42,465	1,189	1,519	36,860
June	1,592	1,909	47,832	1,414	1,681	42,455
July	1,366	1,672	42,240	1,220	1,422	37,717
August	1,621	2,344	50,489	1,447	1,929	44,949
September	1,211	1,504	36,318	1,088	1,346	32,512
October	1,091	1,379	33,958	987	1,167	30,580
November	1,064	1,328	32,039	952	1,091	28,594
December	1,043	1,431	32,417	937	1,142	29,012
Annual Total			460,897			413,006
Maximum		2,344			1,929	
Average	1,260			1,131		
% Capacity		32			26	
Permit to Take Water Limit		7,300				
Municipal Drinking Water Licence Limit					7,300	

The Regional Municipality of Durham Beaverton Drinking Water System Capacity and Treated Water Flow Data

Year	Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Maximum Daily Flow (m ³ /day) Pro-rated	System Capacity (m ³ /day)
2012	1,101	2,202	7,300
2013	1,057	1,850	7,300
2014	1,161	2,251	7,300
2015	1,112	2,208	7,300
2016	1,034	1,989	7,300
2017	1,039	2,740	7,300
2018	964	1,643	7,300
2019	953	1,990	7,300
2020	1,082	2,679	7,300
2021	1,131	1,929	7,300

Beaverton Drinking Water System Capacity and Treated Water Flow Graph



The Regional Municipality of Durham
 Blackstock Drinking Water System

2021 Flow Data - Well Number (#) 7* and Well # 8 Raw Water

Month	Well # 7 Raw Water Maximum Taken per Minute (litres)	Well # 7 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 7 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 7 Total Raw Water Flow (m ³)	Well # 8 Raw Water Maximum Taken per Minute (litres)	Well # 8 Raw Water Monthly Average Flow (m ³ /day) Pro-rated	Well # 8 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 8 Total Raw Water Flow (m ³)
January	0	0	0	0	564	109	156	3,361
February	0	0	0	0	558	118	162	3,283
March	0	0	0	0	558	119	159	3,676
April	0	0	0	0	558	119	172	3,554
May	0	0	0	0	660	151	249	4,608
June	0	0	0	0	576	180	260	5,376
July	0	0	0	0	564	149	195	4,599
August	0	0	0	0	654	143	200	4,405
September	0	0	0	0	582	144	188	4,243
October	0	0	0	0	600	144	210	4,437
November	0	0	0	0	618	145	219	4,333
December	0	0	0	0	618	149	196	4,578
Annual Total								50,453
Maximum					660		260	
Average						139		
% Capacity					96		26	
Permit to Take Water Limit	684		985		684		985	

*Well 7, not in service in 2021.

The Regional Municipality of Durham
 Blackstock Drinking Water System

2021 Flow Data - Reservoir/System Total Treated Water

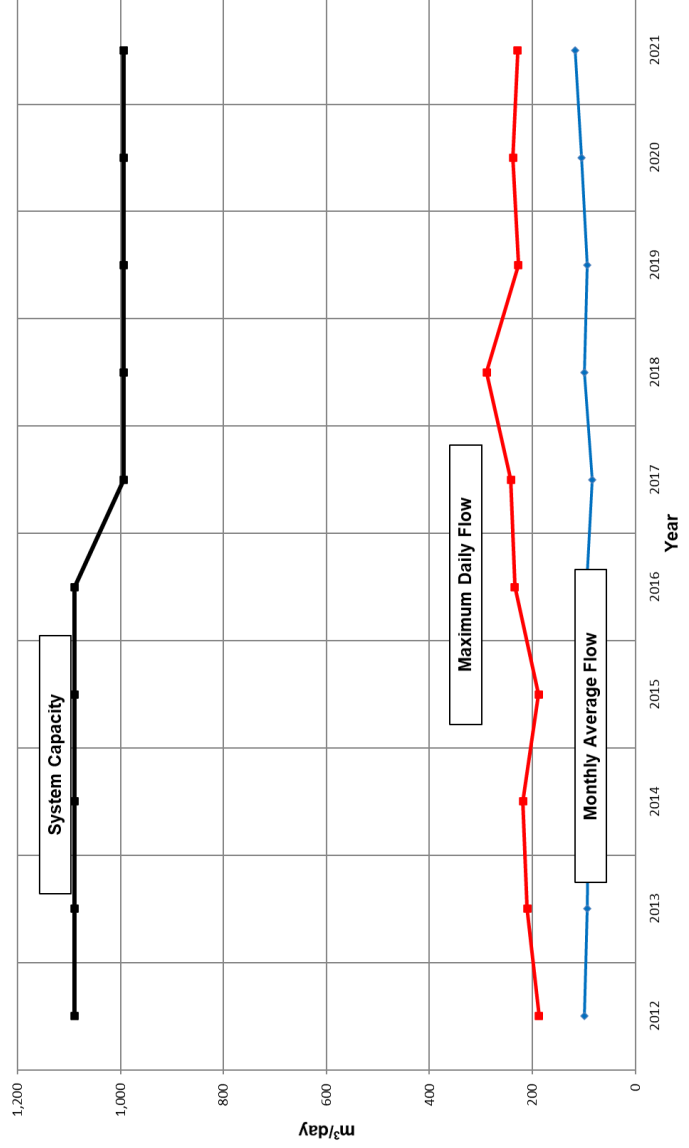
Month	Treated Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Total Treated Water Flow (m ³)
January	85	101	2,645
February	96	131	2,670
March	97	139	3,010
April	99	143	2,965
May	126	229	3,853
June	162	226	4,819
July	132	179	4,047
August	117	164	3,593
September	119	158	3,526
October	122	165	3,751
November	123	175	3,660
December	129	159	3,965
Total			42,504
Maximum		229	
Average	117		
% Capacity		23	
Municipal Drinking Water Licence Limit		994	

The Regional Municipality of Durham Blackstock Drinking Water System Capacity and Treated Water Flow Data

Year	Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Maximum Daily Flow (m ³ /day) Pro-rated	System Capacity (m ³ /day)
2012	99	187	1,089
2013	93	210	1,089
2014	91	218	1,089
2015	94	188	1,089
2016	95	234	994*
2017	84	242	994*
2018	98	289	994*
2019	93	227	994*
2020	105	238	994*
2021	117	229	994*

*Well 7, not in service.

Blackstock Drinking Water System Capacity and Treated Water Flow Graph



**The Regional Municipality of Durham
Bowmanville Drinking Water System
2021 Flow Data – Raw and Treated Water**

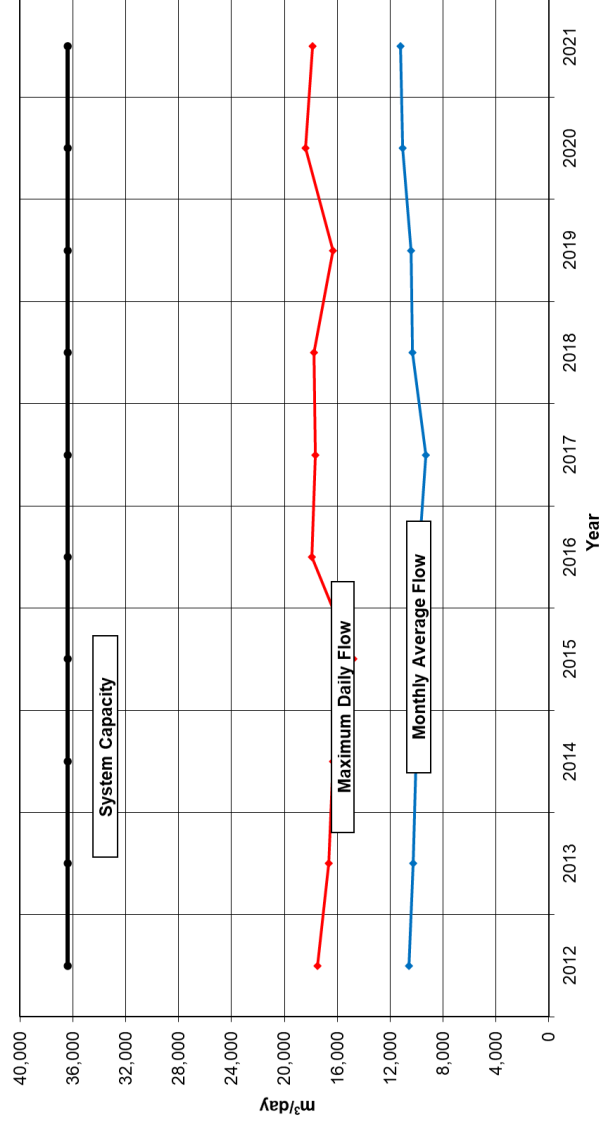
Month	Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day)	Raw Water Maximum Daily Flow (m ³ /day)	Total Raw Water Flow (m ³)	Treated Water Monthly Average Flow (m ³ /day)	Treated Water Maximum Daily Flow (m ³ /day)	Total Treated Water Flow (m ³)
January	10,878	14,008	337,222	10,315	12,625	314,181
February	11,239	13,677	314,680	10,457	12,543	292,803
March	11,235	13,475	348,296	10,512	12,465	325,857
April	11,290	13,857	338,701	10,524	12,716	315,718
May	13,152	17,420	407,718	12,331	16,801	382,255
June	15,064	18,626	451,915	13,970	17,867	419,091
July	12,551	16,365	389,090	11,480	14,767	355,890
August	13,470	16,575	417,578	12,421	15,531	385,043
September	12,308	15,361	369,230	11,366	15,174	340,980
October	11,759	15,298	364,531	10,886	13,953	337,474
November	11,184	13,510	335,520	10,280	12,566	308,406
December	11,165	12,385	346,109	10,183	11,219	315,665
Annual Total			4,420,590			4,093,363
Maximum		18,626			17,867	
Average	12,108			11,227		
% Capacity		39			49	
Permit to Take Water Limit		47,700				
Municipal Drinking Water Licence Limit					36,368	

The Regional Municipality of Durham Bowmanville Drinking Water System Capacity and Treated Water Flow Data

Year	Monthly Average Flow Cubic Metres per Day (m ³ /day)	Maximum Daily Flow (m ³ /day)	System Capacity (m ³ /day)
2012	10,611	17,518	36,368
2013	10,280	16,633	36,368
2014	10,051	16,333	36,368
2015	9,722	14,815	36,368
2016	9,858	17,935	36,368
2017	9,321	17,659	36,368
2018	10,340	17,750	36,368
2019	10,423	16,354	36,368
2020	11,079	18,409	36,368
2021	11,227	17,867	36,368

52

Bowmanville Drinking Water System Capacity and Treated Water Flow Graph



The Regional Municipality of Durham
Cannington Drinking Water System

2021 Flow Data – Well Number (#) 2 Raw Water and *Treated Water

Month	Well # 2 Raw Water Maximum Taken per Minute (litres)	Well # 2 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 2 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 2 Total Raw Water Flow (m ³)	Well # 2 Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Well # 2 Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 2 Total Treated Water Flow (m ³)
January	70	32	36	1,008	32	36	1,008
February	70	36	42	1,004	36	42	1,004
March	70	32	42	989	32	42	989
April	80	32	39	966	32	39	966
May	75	37	50	1,150	37	50	1,150
June	80	39	47	1,188	39	47	1,188
July	80	39	45	1,132	39	45	1,132
August	80	42	54	1,294	42	54	1,294
September	80	88	108	2,634	88	108	2,634
October	80	108	112	3,325	108	112	3,325
November	80	89	110	2,697	89	110	2,697
December	80	41	51	1,277	41	51	1,277
Annual Total				18,664			18,664
Maximum	80		112			112	
Average		51			51		
% Capacity	95		93			22	
Permit to take water limit	84		121				
Municipal Drinking Water License Limit						510**	

*Treated water volumes calculated by subtracting waste from raw water volumes.

**Limit is combined for Wells 2 & 7.

The Regional Municipality of Durham
Cannington Drinking Water System

2021 Flow Data – Well Number (#) 7 Raw Water and *Treated Water

Month	Well # 7 Raw Water Maximum Taken per Minute (litres)	Well # 7 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 7 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 7 Total Raw Water Flow (m ³)	Well # 7 Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Well # 7 Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 7 Total Treated Water Flow (m ³)
January	260	130	145	4,061	130	145	4,061
February	260	145	172	4,056	145	172	4,056
March	260	130	172	4,006	130	172	4,006
April	260	129	155	3,881	129	155	3,881
May	260	151	201	4,683	151	201	4,683
June	265	161	187	4,845	161	187	4,845
July	260	137	155	3,956	137	155	3,956
August	260	144	181	4,496	144	181	4,496
September	260	303	366	9,111	303	366	9,111
October	250	358	365	11,048	358	365	11,048
November	260	302	368	9,100	302	368	9,100
December	260	137	170	4,270	137	170	4,270
Annual Total				67,513			67,513
Maximum	265		368			368	
Average		186			186		
% Capacity	98		95			72	
Permit to take water limit	270		389				
Municipal Drinking Water License Limit						510**	

*Treated water volumes calculated by subtracting waste from raw water volumes.

**Limit is combined for Wells 2 & 7.

The Regional Municipality of Durham
Cannington Drinking Water System

2021 Flow Data - * Well Numbers (#) 2 and 7 *Treated Water

Month	Well # 2 and 7 Treated Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 2 and 7 Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 2 and 7 Total Treated Water Flow (m ³)
January	162	181	5,070
February	181	214	5,060
March	162	214	4,995
April	161	194	4,847
May	189	251	5,833
June	200	233	6,033
July	176	200	5,088
August	186	235	5,790
September	391	474	11,745
October	466	477	14,373
November	391	478	11,797
December	178	221	5,547
Maximum		478	
Average	237		
% Capacity		94	
Municipal Drinking Water Licence Limit		510	

*Treated water volumes calculated by subtracting waste from raw water volumes.

The Regional Municipality of Durham

Cannington Drinking Water System

2021 Flow Data – Well Number (#) 3 Raw Water and *Treated Water

Month	Well # 3 Raw Water Maximum Taken per Minute (litres)	Well # 3 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 3 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 3 Total Raw Water Flow (m ³)	Well # 3 Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Well # 3 Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 3 Total Treated Water Flow (m ³)
January	170	84	93	2,638	84	93	2,638
February	170	94	114	2,637	94	114	2,637
March	170	85	114	2,631	85	114	2,631
April	170	85	100	2,558	85	100	2,558
May	170	99	129	3,054	99	129	3,054
June	170	104	131	3,132	104	131	3,132
July	170	93	136	2,868	93	136	2,868
August	170	95	117	2,968	95	117	2,968
September	170	148	186	4,467	148	186	4,467
October	170	167	216	5,163	167	216	5,163
November	170	143	228	4,325	143	228	4,325
December	160	85	101	2,647	85	101	2,647
Annual Total				39,087			39,087
Maximum	170		228			228	
Average		107			107		
% Capacity	94		88			88	
Permit to take water limit	180		259				
Municipal Drinking Water License Limit						259	

*Treated water volumes calculated by subtracting waste from raw water volumes.

The Regional Municipality of Durham
Cannington Drinking Water System

2021 Flow Data – Well Number (#) 4 Raw Water and *Treated Water

Month	Well # 4 Raw Water Maximum Taken per Minute (litres)	Well # 4 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 4 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 4 Total Raw Water Flow (m ³)	Well # 4 Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Well # 4 Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 4 Total Treated Water Flow (m ³)
January	190	89	109	2,770	89	109	2,770
February	185	82	109	1,153	88	109	1,144
March	180	86	109	2,657	86	109	2,657
April	190	88	105	2,652	88	105	2,652
May	180	99	127	3,055	99	127	3,055
June	180	106	125	3,195	106	125	3,195
July	180	97	137	3,030	97	137	3,030
August	180	100	125	3,098	100	125	3,098
September	180	156	199	4,696	156	199	4,696
October	180	177	210	5,485	177	210	5,485
November	190	150	240	4,528	150	240	4,528
December	180	94	137	2,943	94	137	2,943
Annual Total				39,262			39,253
Maximum	190		240			240	
Average		110			111		
% Capacity	99		87			87	
Permit to take water limit	192		277				
Municipal Drinking Water License Limit							276

*Treated water volumes calculated by subtracting waste from raw water volumes.

The Regional Municipality of Durham
Cannington Drinking Water System

2021 Flow Data – Well Number (#) 8 Raw Water and *Treated Water

Month	Well # 8 Raw Water Maximum Taken per Minute (litres)	Well # 8 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 8 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 8 Total Raw Water Flow (m ³)	Well # 8 Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Well # 8 Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 8 Total Treated Water Flow (m ³)
January	370	169	189	5,269	169	189	5,269
February	370	192	232	5,363	192	232	5,363
March	370	168	232	5,213	168	232	5,213
April	370	164	207	4,949	164	207	4,949
May	370	198	238	6,110	198	238	6,110
June	370	206	235	6,206	199	235	6,206
July	370	184	253	5,748	184	253	5,748
August	370	190	235	5,933	190	235	5,933
September	370	393	479	11,837	393	479	11,837
October	340	467	478	14,475	467	478	14,475
November	380	397	477	11,874	397	477	11,874
December	370	185	259	5,755	185	259	5,755
Annual Total				88,730			88,730
Maximum	380		479			479	
Average		243			242		
% Capacity	67		59			59	
Permit to take water limit	568		818				
Municipal Drinking Water License Limit						818	

*Treated water volumes calculated by subtracting waste from raw water volumes.

The Regional Municipality of Durham
 Cannington Drinking Water System
 2021 Flow Data – Total System Raw and *Treated Water

Month	Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Total Raw Water Flow (m ³)	Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Total Treated Water Flow (m ³)
January	506	571	15,683	505	505	567
February	509	668	14,213	508	508	668
March	501	669	15,496	501	501	669
April	497	579	15,006	497	497	579
May	584	740	18,052	584	584	740
June	616	700	18,566	616	616	700
July	538	643	16,733	538	538	643
August	571	695	17,788	571	571	695
September	1,088	1,329	32,744	1088	1,088	1,329
October	1,277	1,352	39,496	1277	1,277	1,352
November	1,082	1,402	32,524	1082	1,082	1,402
December	543	658	16,892	543	543	658
Annual Total			253,192			253,192
Maximum		1,402			1,402	
Average	693			693		
% Capacity		75			75	
Permit to take water limit		1,863				
Municipal Drinking Water License Limit					1,863	

*Treated water volumes calculated by subtracting waste from raw water volumes.

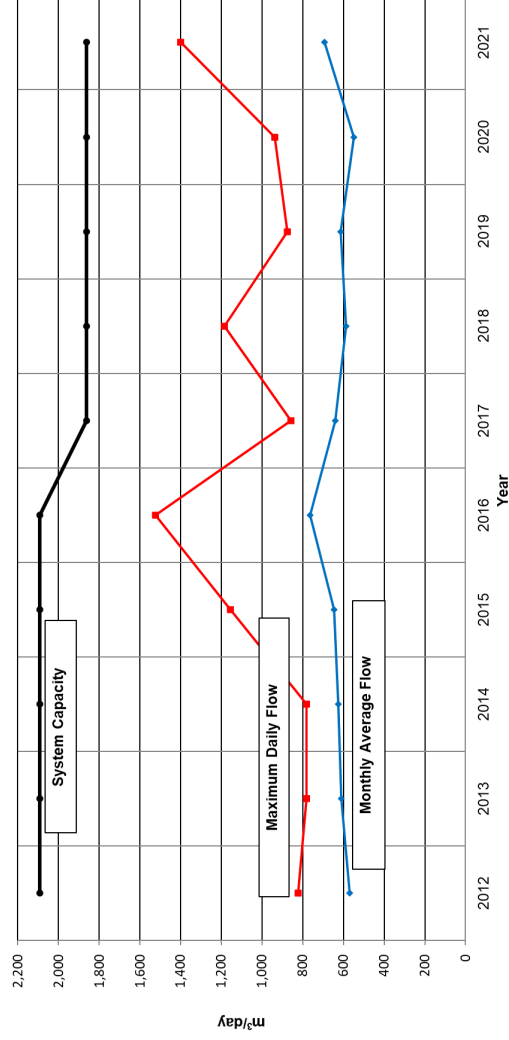
The Regional Municipality of Durham

Cannington Drinking Water System Capacity and Treated Water Flow Data

Year	Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Maximum Daily Flow (m ³ /day) Pro-rated	System Capacity (m ³ /day)
2012	570	824	2,092
2013	611	781	2,092
2014	625	782	2,092
2015	645	1,157	2,092
2016	765	1,523	2,092
2017	641	857	1,863*
2018	586	1,186	1,863
2019	614	876	1,863
2020	550	938	1,863
2021	693	1,402	1,863

*Capacity changed due to decommissioning of Well 6.

Cannington Drinking Water System Capacity and Treated Water Flow Graph



The Regional Municipality of Durham
Greenbank Drinking Water System

2021 Flow Data - Well Number (#) 1* Raw Water and Well # 3 Raw Water

Month	Well # 1 Raw Water Maximum Taken per Minute (litres)	Well # 1 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 1 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 1 Total Raw Water Flow (m ³)	Well # 3 Raw Water Maximum Taken per Minute (litres)	Well # 3 Raw Water Monthly Average Flow (m ³ /day) Pro-rated	Well # 3 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 3 Total Raw Water Flow (m ³)
January	50	24	27	741	86	41	48	1,266
February	50	24	34	668	86	42	57	1,196
March	0	0	0	0	85	50	58	1,568
April	60	16	25	308	83	36	61	1,088
May	60	25	41	785	80	35	55	1,079
June	60	22	28	667	81	30	38	900
July	60	20	25	611	80	27	35	843
August	60	22	29	686	80	32	42	977
September	60	18	24	554	80	27	36	815
October	60	19	31	575	80	26	52	812
November	60	16	22	487	80	24	32	728
December	60	17	22	493	82	24	33	731
Annual Total				6,575				12,003
Maximum	60		41		86		61	
Average		19				33		
% Capacity	86		41		95		47	
Permit to take water limit	70		101		91		130	

*Well #1 was out of service for maintenance from February 28 to April 12, 2021.

The Regional Municipality of Durham
Greenbank Drinking Water System

2021 Flow Data - Well Number (#) 4 Raw Water and Well # 5 Raw Water

Month	Well # 4 Raw Water Maximum Taken per Minute (litres)	Well # 4 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 4 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 4 Total Raw Water Flow (m ³)	Well # 5 Raw Water Maximum Taken per Minute (litres)	Well # 5 Raw Water Monthly Average Flow (m ³ /day) Pro-rated	Well # 5 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 5 Total Raw Water Flow (m ³)
January	61	27	31	842	50	22	26	695
February	62	28	39	803	50	22	29	622
March	63	34	39	1,050	56	27	31	833
April	60	25	40	735	60	22	32	642
May	66	25	42	774	60	23	39	640
June	62	22	27	669	61	20	27	607
July	62	20	26	617	60	18	27	572
August	60	23	29	715	60	22	28	665
September	58	20	27	596	60	18	23	524
October	60	19	39	592	56	17	37	490
November	58	16	21	482	55	16	22	463
December	60	15	22	476	60	16	22	500
Annual Total				8,350				7,251
Maximum	66	23	42		61	20	39	
Average								
% Capacity	97		42		90		39	
Permit to take water limit	68		99		68		99	

The Regional Municipality of Durham
 Greenbank Drinking Water System
 2021 Flow Data - Well Number (#) 6 Raw Water

Month	Well # 6 Raw Water Maximum Taken per Minute (litres)	Well # 6 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 6 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 6 Total Raw Water Flow (m ³)
January	81	38	44	1,193
February	80	39	53	1,117
March	80	46	55	1,436
April	85	34	54	1,025
May	82	33	54	1,006
June	82	30	36	906
July	80	27	38	843
August	83	33	42	1,020
September	80	27	37	822
October	80	26	54	811
November	80	24	31	713
December	82	23	33	713
Annual Total				11,606
Maximum	85		55	
Average		32		
% Capacity	93		42	
Permit to take water limit	91		130	

The Regional Municipality of Durham
 Greenbank Drinking Water System
 2021 Flow Data - Reservoir/System Total Treated Water

Month	Treated Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Total Treated Water Flow (m ³)
January	152	164	4,698
February	156	167	4,373
March	156	163	4,835
April	122	171	3,666
May	137	204	4,260
June	126	185	3,806
July	112	145	3,486
August	131	160	4,034
September	109	131	3,304
October	100	167	3,118
November	91	97	2,714
December	91	107	2,814
Annual Total			45,108
Maximum		204	
Average	124		
% Capacity		37	
Municipal Drinking Water Licence Limit		553	

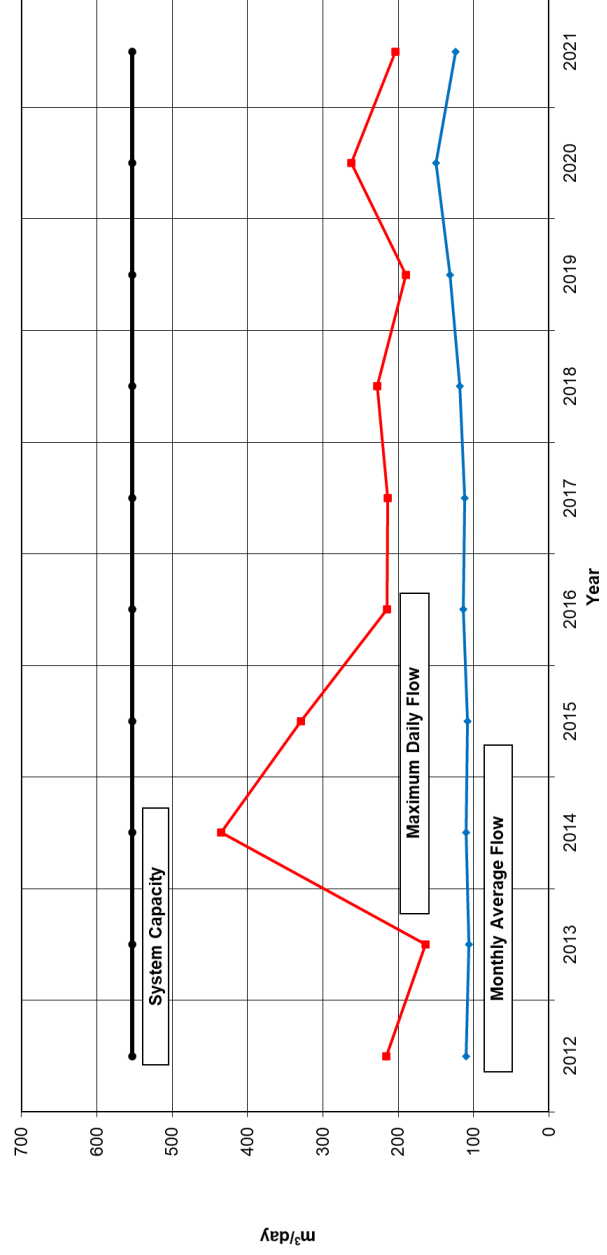
The Regional Municipality of Durham

Greenbank Drinking Water System Capacity and Treated Water Flow Data

Year	Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Maximum Daily Flow (m ³ /day) Pro-rated	System Capacity (m ³ /day)
2012	110	216	553
2013	106	164	553
2014	110	435	553
2015	108	329	553
2016	114	215	553
2017	112	214	553
2018	119	228	553
2019	131	190	553
2020	150	262	553
2021	124	204	553

65

Greenbank Drinking Water System Capacity and Treated Water Flow Graph



**The Regional Municipality of Durham
Newcastle Drinking Water System
2021 Flow Data - Raw Water and Treated Water**

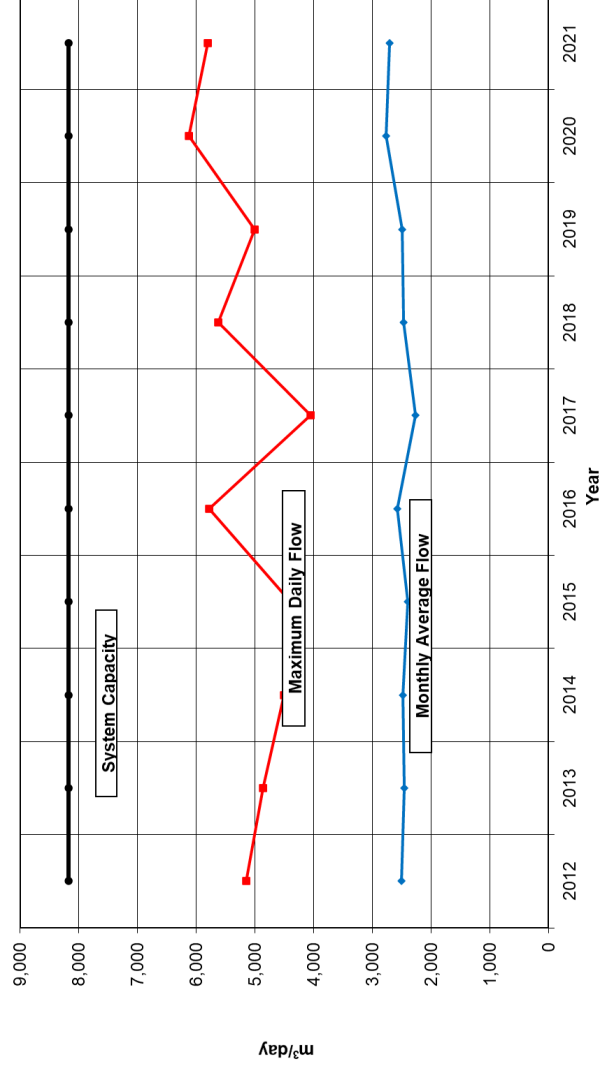
Month	Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day)	Raw Water Maximum Daily Flow (m ³ /day)	Total Raw Water Flow (m ³)	Treated Water Monthly Average Flow (m ³ /day)	Treated Water Maximum Daily Flow (m ³ /day)	Total Treated Water Flow (m ³)
January	2,451	3,048	75,967	2,321	2,922	71,963
February	2,529	3,489	70,806	2,413	3,261	67,560
March	2,511	3,444	77,853	2,389	3,300	74,046
April	2,520	3,560	75,292	2,378	3,301	71,332
May	3,260	5,337	101,052	3,102	4,969	96,170
June	3,960	6,123	118,788	3,771	5,802	113,143
July	3,041	4,537	94,267	2,859	4,199	88,631
August	3,563	4,612	110,463	3,371	4,358	104,508
September	2,949	3,979	88,478	2,764	3,710	82,915
October	2,582	3,527	80,055	2,407	3,294	74,628
November	2,445	3,543	73,345	2,304	3,328	69,118
December	2,521	3,269	78,145	2,401	3,069	74,440
Annual Total			1,044,511			988,454
Maximum		6,123			5,802	
Average	2,861			2,707		
% Capacity		34			71	
Permit to Take Water Limit		18,100				
Municipal Drinking Water Licence Limit					8,173	

The Regional Municipality of Durham Newcastle Drinking Water System Capacity and Treated Water Flow Data

Year	Monthly Average Flow Cubic Metres per Day (m ³ /day)	Maximum Daily Flow (m ³ /day)	System Capacity (m ³ /day)
2012	2,508	5,149	8,173
2013	2,457	4,868	8,173
2014	2,480	4,504	8,173
2015	2,398	4,398	8,173
2016	2,579	5,777	8,173
2017	2,272	4,056	8,173
2018	2,476	5,623	8,173
2019	2,489	5,004	8,173
2020	2,767	6,125	8,173
2021	2,707	5,802	8,173

67

Newcastle Drinking Water System Capacity and Treated Water Flow Graph



The Regional Municipality of Durham
Orono Drinking Water System

2021 Flow Data - Well Number (#) 3* Raw Water and Well # 4* Raw Water

Month	Well # 3 Raw Water Maximum Taken per Minute (litres)	Well # 3 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 3 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 3 Total Raw Water Flow (m ³)	Well # 4 Raw Water Maximum Taken per Minute (litres)	Well # 4 Raw Water Monthly Average Flow (m ³ /day) Pro-rated	Well # 4 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 4 Total Raw Water Flow (m ³)
January	720	274	336	6,238	708	256	336	2,095
February	744	275	476	5,693	720	286	389	1,955
March	720	333	438	7,568	684	331	403	2,646
April	720	364	461	8,037	684	312	442	2,477
May	720	378	764	9,074	672	338	535	2,859
June	720	445	751	9,422	672	477	565	4,295
July	720	345	447	7,828	666	372	498	2,973
August	720	418	543	9,938	684	416	506	2,981
September	724	298	418	6,630	684	272	413	2,240
October	726	269	434	7,414	684	186	295	1,156
November*	720	258	349	7,669	0	0	0	0
December*	720	246	327	7,610	816	44	66	97
Annual Total				93,121				25,774
Maximum	744		764		816		565	
Average		325				274		
% Capacity	82		88		90		65	
Permit to Take Water Limit	909		872		909		872	

*Well cannot be run for more than sixteen hours per day as indicated in the Permit to Take Water.

**Well #4 out of service due to maintenance in November and December 2021.

The Regional Municipality of Durham
Orono Drinking Water System

2021 Flow Data - Well Number (#) 5* Raw Water and System Total Treated Water**

Month	Well # 5* Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 5* Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 5* Total Raw Water Flow (m ³)	System Total Treated Water Monthly Average Flow (m ³ /day) Pro-rated	System Total Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	System Total Treated Water Flow (m ³)
January	0	0	0	264	336	8,153
February	0	0	0	273	476	7,480
March	0	0	0	327	420	10,035
April	0	0	0	334	461	10,355
May	0	0	0	387	746	11,773
June	0	0	0	442	751	13,560
July	0	0	0	347	478	10,641
August	0	0	0	413	543	12,759
September	0	0	0	296	418	8,690
October	0	0	0	274	434	8,426
November	0	0	0	250	349	7,669
December	0	0	0	246	327	7,610
Annual Total						117,150
Maximum					751	
Average				321		
% Capacity					86/43	
Permit to Take Water Limit	909	872				
Municipal Drinking Water Licence Limit					873/1,745***	

*Well not in service.

**Treated water volumes calculated by subtracting waste from raw water volumes.

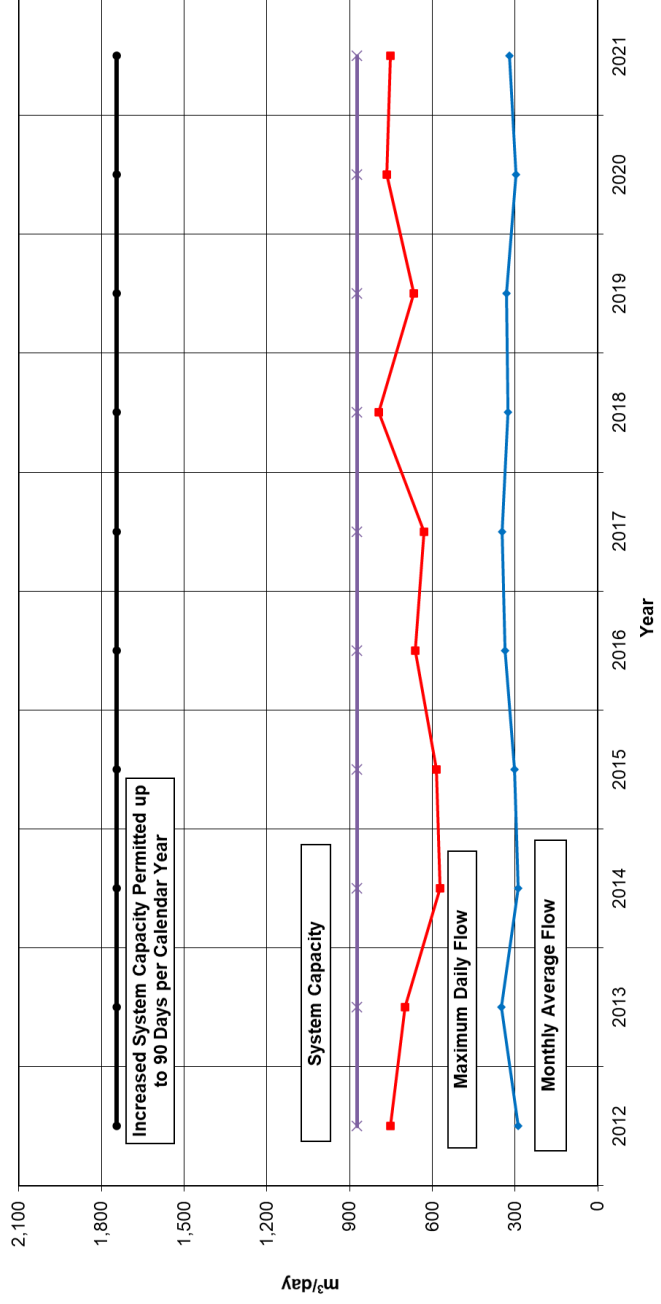
***The rated capacity can be increased to 1,745 m³/day for up to 90 days per calendar year.

The Regional Municipality of Durham Orono Drinking Water System Capacity and Treated Water Flow Data

Year	Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Maximum Daily Flow (m ³ /day) Pro-rated	System Capacity (m ³ /day)	Increased System Capacity* (m ³ /day)
2012	289	751	873	1,745
2013	350	699	873	1,745
2014	288	572	873	1,745
2015	301	584	873	1,745
2016	336	661	873	1,745
2017	348	631	873	1,745
2018	325	794	873	1,745
2019	330	666	873	1,745
2020	296	764	873	1,745
2021	321	751	873	1,745

*The rated system capacity can be increased to 1,745 m³/day not exceeding 90 days per calendar year.

Orono Drinking Water System Capacity and Treated Water Flow Graph



The Regional Municipality of Durham
Oshawa Drinking Water System

2021 Flow Data – Plant 1 West Intake Raw Water and Plant 2 East Intake Raw Water

Month	Plant 1 West Intake Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day)	Plant 1 West Intake Raw Water Maximum Daily Flow (m ³ /day)	Plant 1 West Intake Total Raw Water Flow (m ³)	Plant 2 East Intake Raw Water Monthly Average Flow (m ³ /day)	Plant 2 East Intake Raw Water Maximum Daily Flow (m ³ /day)	Plant 2 East Intake Total Raw Water Flow (m ³)
January	10,968	12,602	339,997	37,658	43,054	1,167,401
February	11,082	12,580	310,308	37,080	40,408	1,038,231
March	10,739	12,345	332,922	36,861	42,582	1,142,704
April	10,894	11,794	326,828	36,650	38,954	1,099,508
May	13,529	17,548	419,405	46,147	62,840	1,430,557
June	14,051	17,130	421,536	50,612	62,103	1,518,352
July	11,820	14,388	366,417	43,421	53,280	1,346,046
August	12,406	14,358	384,591	45,033	55,176	1,396,037
September	11,860	14,001	355,789	40,321	51,803	1,209,638
October	11,724	13,317	363,444	38,287	43,006	1,186,886
November	11,710	13,364	351,300	39,432	44,690	1,182,957
December	11,182	13,132	346,651	38,256	44,079	1,185,936
Annual Total			4,319,188			14,904,253
Maximum		17,548			62,840	
Average	11,830			40,813		
% Capacity		40			70	
Permit to Take Water Limit		44,000			90,000	

**The Regional Municipality of Durham
Oshawa Drinking Water System
2021 Flow Data - Total Raw Water and Treated Water**

Month	Total Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day)	Total Raw Water Maximum Daily Flow (m ³ /day)	Total Raw Water Flow (m ³)	Total Treated Water Monthly Average Flow (m ³ /day)	Total Treated Water Maximum Daily Flow (m ³ /day)	Total Treated Water Flow (m ³)
January	48,626	55,526	1,507,398	43,314	49,563	1,342,739
February	48,162	52,988	1,348,539	44,050	48,008	1,233,408
March	47,601	54,926	1,475,626	42,615	50,143	1,321,067
April	47,545	50,748	1,426,336	42,250	44,459	1,267,502
May	59,676	80,388	1,849,962	53,093	70,366	1,645,891
June	64,663	78,862	1,939,888	57,964	71,381	1,738,917
July	55,241	67,668	1,712,463	51,362	61,470	1,592,232
August	57,440	63,390	1,780,628	53,143	64,373	1,647,419
September	52,181	65,805	1,565,427	46,762	60,752	1,402,848
October	50,011	55,869	1,550,330	43,989	49,921	1,363,666
November	51,142	56,853	1,534,256	44,947	49,420	1,348,408
December	49,438	56,972	1,532,587	43,259	49,989	1,341,033
Annual Total			19,223,440			17,245,130
Maximum		80,388			71,381	
Average	52,644			47,229		
% Capacity		60			67	
Permit to Take Water Limit		134,000*				
Municipal Drinking Water Licence Limit					134,000*	

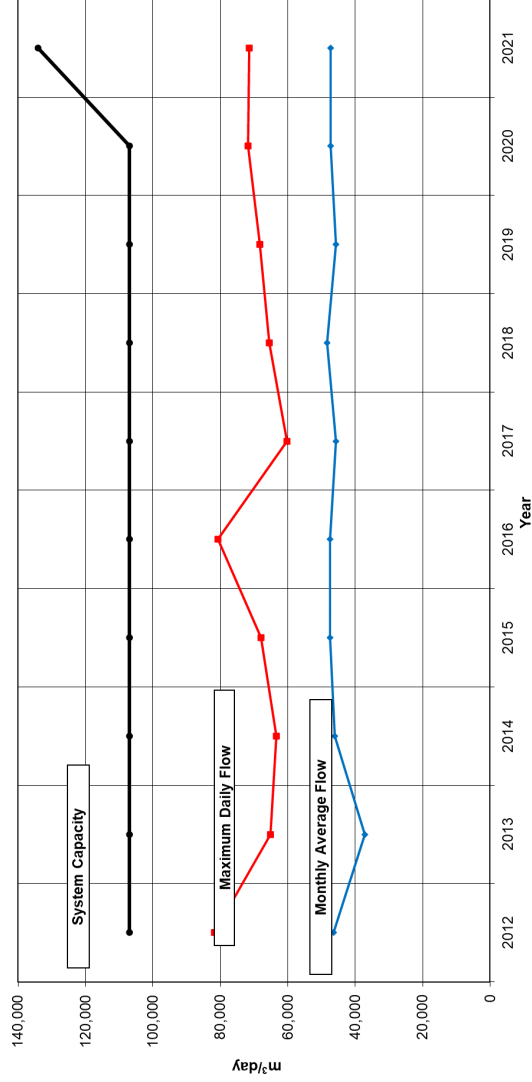
*Limit is a system total of 134,000 m³/day.

The Regional Municipality of Durham Oshawa Drinking Water System Capacity and Treated Water Flow Data

Year	Monthly Average Flow Cubic Metres per Day (m ³ /day)	Maximum Daily Flow (m ³ /day)	System Capacity (m ³ /day)
2012	46,366	81,828	107,000
2013	37,155	65,193	107,000
2014	46,124	63,427	107,000
2015	47,429	67,944	107,000
2016	47,443	80,756	107,000
2017	45,763	60,306	107,000
2018	48,334	65,556	107,000
2019	45,707	68,374	107,000
2020	47,311	71,764	107,000/134,000*
2021	47,229	71,381	134,000

*Oshawa Plant 1 has a capacity of 27,000 m³/day. Plant 2 has a capacity of 107,000 m³/day. Plant 1 was out of service from 2010 to 2020 for upgrades. When it came online November 3rd, 2020 the system capacity increased from 107,000 m³/day to 134,000 m³/day.

Oshawa Drinking Water System Capacity and Treated Water Flow Graph



**The Regional Municipality of Durham
Port Perry Drinking Water System
2021 Flow Data - Well Number (#) 3 Raw and Treated Water and Well # 5 Raw and Treated Water**

Month	Well # 3 Maximum Taken per Minute (litres)	Well # 3 Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 3 Maximum Daily Flow (m ³ /day) Pro-rated	Well # 3 Total Water Flow (m ³)	Well # 5 Maximum Taken per Minute (litres)	Well # 5 Monthly Average Flow (m ³ /day) Pro-rated	Well # 5 Maximum Daily Flow (m ³ /day) Pro-rated	Well # 5 Total Water Flow (days)
January	1,700	242	926	7,563	1,700	205	271	6,135
February	1,700	220	292	6,137	1,700	205	273	5,711
March	1,775	193	336	6,000	1,750	183	356	5,595
April	1,750	180	319	5,267	1,700	168	281	4,915
May	1,700	168	288	5,175	1,700	157	264	4,836
June	1,700	214	328	6,407	1,700	199	292	5,953
July	1,700	223	324	6,914	1,700	208	305	6,446
August	1,700	237	362	7,305	1,700	221	327	6,801
September	1,700	229	322	6,680	1,700	212	301	6,188
October	1,700	188	309	5,888	1,700	174	281	5,438
November	1,700	229	404	6,849	1,700	210	376	6,293
December	1,700	232	348	7,227	1,700	213	317	6,614
Annual Total				77,413				70,925
Maximum	1,775		926		1,750		376	
Average		213				196		
% Capacity	98		35		96		14	
Permit to take water limit	1,817		2,617		1,817		2,617	
Municipal Drinking Water License Limit			2,618				2,618	

The Regional Municipality of Durham
 Port Perry Drinking Water System
 2021 Flow Data - Well Number (#) 6 Raw and Treated Water

Month	Well # 6 Maximum Taken per Minute (litres)	Well # 6 Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 6 Maximum Daily Flow (m ³ /day) Pro-rated	Well # 6 Total Water Flow (m ³)
January	4,320	1,838	2,162	57,192
February	4,320	1,909	2,348	53,915
March	4,320	1,951	2,347	60,779
April	4,320	1,964	2,279	59,039
May	4,320	2,540	3,655	78,858
June	4,320	2,623	3,838	79,191
July	4,380	2,133	2,766	66,585
August	4,320	2,375	3,090	73,401
September	4,300	2,061	2,634	62,256
October	4,300	1,968	2,316	61,068
November	4,300	1,902	2,144	57,116
December	4,300	1,831	2,237	56,948
Annual Total				766,348
Maximum	4,380		3,838	
Average		2,091		
% Capacity	95		59	
Permit to take water limit	4,543		6,542	
Municipal Drinking Water License Limit			6,545	

The Regional Municipality of Durham
 Port Perry Drinking Water System
 2021 Flow Data - System Total Treated Water

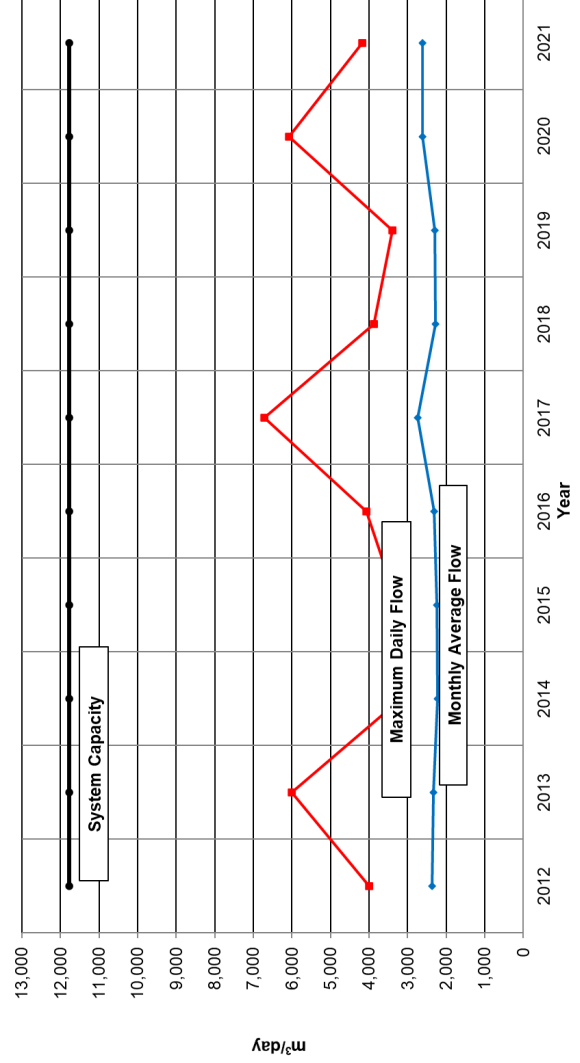
Month	Treated Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Total Treated Water Flow (m ³)
January	2,279	3,030	70,638
February	2,333	2,736	65,329
March	2,327	2,720	72,141
April	2,756	2,301	69,031
May	3,892	2,865	88,802
June	3,036	4,173	91,080
July	2,564	3,101	79,487
August	2,833	3,658	87,819
September	2,488	2,987	74,626
October	2,331	2,721	72,247
November	2,341	2,590	70,258
December	2,275	2,520	70,789
Annual Total			912,248
Maximum		4,173	
Average	2,621		
% Capacity		35	
Permit to take water limit			
Municipal Drinking Water License Limit		11,781	

The Regional Municipality of Durham

Port Perry Drinking Water System Capacity and Treated Water Flow Data

Year	Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Maximum Daily Flow (m ³ /day) Pro-rated	System Capacity (m ³ /day)
2012	2,365	4,001	11,781
2013	2,341	6,006	11,781
2014	2,228	3,167	11,781
2015	2,245	3,251	11,781
2016	2,317	4,075	11,781
2017	2,740	6,724	11,781
2018	2,289	3,873	11,781
2019	2,292	3,403	11,781
2020	2,613	6,070	11,781
2021	2,621	4,173	11,781

Port Perry Drinking Water System Capacity and Treated Water Flow Graph



**The Regional Municipality of Durham
Sunderland Drinking Water System
2021 Flow Data - Well Number (#) 1 Raw Water and Treated* Water**

Month	Well # 1 Raw Water Maximum Taken per Minute (litres)	Well # 1 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 1 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 1 Total Raw Water Flow (m ³)	Well #1 Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Well #1 Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 1 Total Treated Water Flow (m ³)
January	468	208	382	6,414	208	382	6,414
February	468	171	206	4,787	171	206	4,787
March	468	163	228	5,056	163	228	5,056
April	468	123	269	3,449	123	269	3,449
May	456	200	287	6,010	200	287	6,010
June	456	221	354	6,626	221	354	6,626
July	456	150	209	4,513	150	209	4,513
August	456	204	385	6,343	204	385	6,343
September	456	184	286	5,555	184	286	5,555
October	456	194	391	6,010	194	391	6,010
November	456	174	324	5,244	174	324	5,244
December	450	181	234	5,633	181	234	5,633
Annual Total				65,639			65,639
Maximum	468		391			391	
Average		181			181		
% Capacity	46		29			28	
Permit to Take Water Limit	1,023		1,373				
Municipal Drinking Water Licence Limit						1,374	

*Treated water volumes calculated by subtracting waste from raw water volumes.

The Regional Municipality of Durham
Sunderland Drinking Water System

2021 Flow Data - *Well Number (#) 2 Raw Water and Treated Water

Month	Well # 2 Raw Water Maximum Taken per Minute (litres)	Well # 2 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 2 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 2 Raw Water Flow (m ³)	Well # 2 Treated Monthly Average Flow (m ³ /day) Pro-rated	Well # 2 Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 2 Total Treated Water Flow (m ³)
January	-	4	4	14	0	0	0
February	-	4	8	16	0	0	0
March	-	5	12	25	0	0	0
April	-	5	7	20	0	0	0
May	-	4	5	19	0	0	0
June	-	9	15	36	0	0	0
July	-	5	7	21	0	0	0
August	-	4	6	22	0	0	0
September	-	3	4	11	0	0	0
October	-	3	4	13	0	0	0
November	-	4	6	19	0	0	0
December	-	3	4	13	0	0	0
Annual Total				229			
Maximum			15				
Average		4					
% Capacity			1				
Permit to Take Water Limit	1,023		1,373				
Municipal Drinking Water Licence Limit						1,374	

*Well 2 was offline in 2021.

**The Regional Municipality of Durham
Sunderland Drinking Water System
2021 Flow Data - Well Number (#) 3 Raw Water and Treated* Water**

Month	Well # 3 Raw Water Maximum Taken per Minute (litres)	Well # 3 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 3 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 3 Raw Water Flow (m ³)	Well # 3 Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Well # 3 Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 3 Total Treated Water Flow (m ³)
January	504	194	344	6,045	194	344	6,045
February	516	164	209	4,568	164	209	4,568
March	504	207	299	6,434	207	299	6,434
April	504	218	285	6,544	218	285	6,544
May	504	208	278	6,524	208	278	6,524
June	504	192	271	5,599	192	271	5,599
July	504	171	241	5,302	171	241	5,302
August	504	164	216	5,052	164	216	5,052
September	510	183	264	5,491	183	264	5,491
October	516	203	439	6,292	203	439	6,292
November	444	156	319	4,694	156	319	4,694
December	456	157	181	4,850	157	181	4,850
Annual Total				67,395			67,395
Maximum	516		439			439	
Average		185			185		
% Capacity	86		51			51	
Permit to Take Water Limit	600		864				
Municipal Drinking Water Licence Limit						864	

*Treated water volumes calculated by subtracting waste from raw water volumes.

The Regional Municipality of Durham
Sunderland Drinking Water System

2021 Flow Data – System Total Raw Water and Treated* Water

Month	Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Total Raw Water Flow (m ³)	Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Total Treated Water Flow (m ³)
January	402	587	12,473	402	587	12,459
February	336	412	9,371	335	412	9,355
March	371	459	11,514	370	459	11,489
April	333	386	10,013	332	386	9,993
May	403	545	12,553	402	545	12,534
June	408	518	12,261	407	502	12,225
July	317	383	9,836	316	383	9,815
August	368	502	11,417	368	498	11,395
September	367	505	11,057	367	505	11,046
October	398	831	12,315	397	831	12,302
November	331	643	9,957	330	643	9,938
December	338	389	10,496	338	389	10,483
Annual Total			133,263			133,034
Maximum		831			831	
Average	364			364		
% Capacity		30			60	
Permit to Take Water Limit		2,745				
Municipal Drinking Water Licence Limit					1,374	

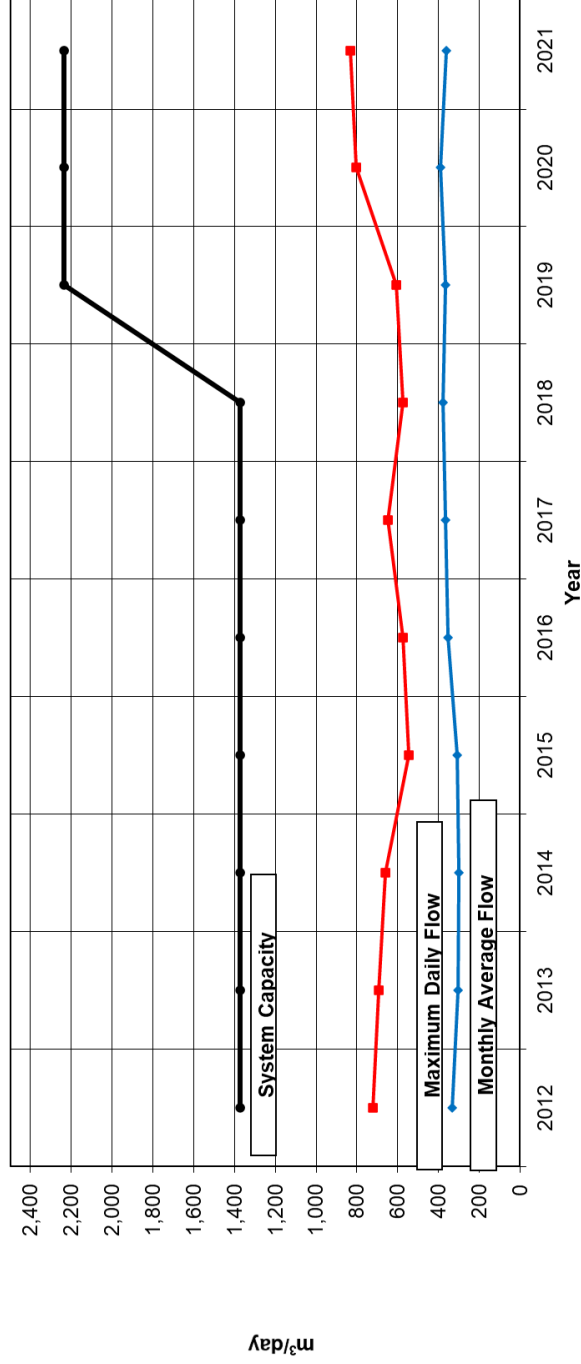
*Treated water volumes calculated by subtracting waste from raw water volumes.

The Regional Municipality of Durham Sunderland Drinking Water System Capacity and Treated Water Flow Data

Year	Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Maximum Daily Flow (m ³ /day) Pro-rated	*System Capacity (m ³ /day)
2012	334	722	1,374
2013	303	693	1,374
2014	301	660	1,374
2015	307	546	1,374
2016	355	576	1,374
2017	367	647	1,374
2018	376	576	1,374
2019	368	608	2,238
2020	389	803	2,238
2021	364	831	2,238

*Sunderland DWS cannot achieve its rated capacity due to hydraulic restrictions within the treatment process.

Sunderland Drinking Water System Capacity and Treated Water Flow Graph



The Regional Municipality of Durham
 Uxbridge Drinking Water System
 2021 Flow Data - Well Number (#) 5 Raw Water and **Treated Water

Month	Well # 5 Raw Water Maximum Taken per Minute (litres)	Well # 5 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 5 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 5 Total Raw Water Flow (m ³)	Well # 5 Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Well # 5 Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 5 Total Treated Water Flow (m ³)
January	2,700	1,040	1,325	19,917	1,039	1,325	19,887
February	2,700	1,068	1,308	18,128	1,067	1,308	18,110
March	2,700	1,057	1,254	19,900	1,056	1,254	19,880
April	2,700	1,026	1,280	15,433	1,024	1,280	15,405
May	2,700	1,440	2,192	24,344	1,439	2,192	24,324
June	2,700	1,443	2,190	40,060	1,441	2,190	40,000
July	2,700	1,193	1,677	34,607	1,191	1,677	34,561
August	2,700	1,477	2,212	40,835	1,475	2,212	40,805
September	2,700	1,285	1,777	24,549	1,283	1,777	24,519
October	2,700	1,049	1,240	20,676	1,048	1,240	20,661
November	2,700	996	1,210	15,896	995	1,210	15,881
December	2,700	967	1,233	17,390	964	1,233	17,345
Annual Total				291,736			291,379
Maximum	2,700		2,212			2,212	
Average		1,170			1,169		
% Capacity	90		51			27	
Permit to take water limit	3,000		4,320				
Municipal Drinking Water License Limit						8,251*	

*Limit is combined for Wells 5 and 7.

**Treated water volumes calculated by subtracting waste from raw water volumes.

**The Regional Municipality of Durham
Uxbridge Drinking Water System
2021 Flow Data - Well Number (#) 7 Raw Water and **Treated Water**

Month	Well # 7 Raw Water Maximum Taken per Minute (litres)	Well # 7 Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 7 Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 7 Total Raw Water Flow (m ³)	Well # 7 Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Well # 7 Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 7 Total Treated Water Flow (m ³)
January	1,560	785	946	12,553	784	946	12,538
February	1,560	733	970	11,776	732	970	11,749
March	1,620	774	967	13,111	772	967	13,081
April	1,500	789	955	15,055	789	955	15,040
May	1,500	983	1,390	18,701	981	1,390	18,671
June	1,500	863	1,709	9,488	858	1,709	9,429
July	1,500	653	1,258	6,559	647	1,258	6,498
August	1,500	767	1,718	9,619	762	1,718	9,559
September	1,500	791	1,093	12,523	787	1,093	12,478
October	1,500	720	1,113	11,689	718	1,113	11,644
November	1,500	724	910	13,036	722	910	13,006
December	1,500	758	996	13,636	756	996	13,606
Annual Total				147,746			147,299
Maximum	1,620		1,718			1,718	
Average		778			776		
% Capacity	54		40			21	
Permit to Take Water Limit	3,000		4,320				
Municipal Drinking Water Licence Limit						8,251*	

*Limit is combined for Wells 5 and 7.

**Treated water volumes calculated by subtracting waste from raw water volumes.

The Regional Municipality of Durham
Uxbridge Drinking Water System

2021 Flow Data - Well Number (#) 5 and 7 **Treated Water and Well # 6 Raw and Treated Water

Month	Well # 5 and 7 Treated Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Well # 5 and 7 Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 5 and 7 Total Treated Water Flow (m ³) Pro-rated	Well # 6 Raw and Treated Water Maximum Taken per Minute (litres)	Well # 6 Raw and Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Well # 6 Raw and Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Well # 6 Total Raw and Treated Water Flow (m ³)
January	1,046	1,633	32,425	2,520	1,337	1,587	41,712
February	1,066	1,503	29,859	2,520	1,362	1,603	38,303
March	1,063	1,482	32,961	2,520	1,360	1,900	42,170
April	1,015	1,475	30,445	2,520	1,385	1,627	41,835
May	1,387	2,588	42,995	2,520	1,785	2,526	55,278
June	1,648	2,362	49,429	2,520	1,886	2,635	56,546
July	1,324	1,788	41,059	2,520	1,540	2,089	48,023
August	1,625	2,477	50,364	2,520	1,869	2,642	58,018
September	1,233	1,913	36,997	2,520	1,583	1,883	47,459
October	1,042	1,296	32,305	2,520	1,367	1,638	42,578
November	963	1,282	28,887	2,520	1,319	1,524	39,570
December	998	1,320	30,951	2,520	1,377	1,691	42,689
Annual Total							554,180
Maximum		2,588		2,520		2,642	
Average	1,201						
% Capacity		31		92		67	
Permit to Take Water Limit		4,320		2,730		3,931	
Municipal Drinking Water Licence Limit		*8,251				3,931	

*Limit is combined for Wells 5 and 7.

**Treated water volumes for Wells 5 and 7 calculated by subtracting waste from raw water volumes.

The Regional Municipality of Durham
Uxbridge Drinking Water System

2021 Flow Data – System Total Raw Water and Treated Water

Month	Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Raw Water Maximum Daily Flow (m ³ /day) Pro-rated	Total Raw Water Flow (m ³)	Treated Water Monthly Average Flow (m ³ /day) Pro-rated	Treated Water Maximum Daily Flow (m ³ /day) Pro-rated	Total Treated Water Flow (m ³)
January	2,380	2,655	74,182	2,378	2,655	74,137
February	2,430	2,715	68,207	2,428	2,700	68,162
March	2,431	2,671	75,181	2,430	2,662	75,131
April	2,398	2,622	72,323	2,397	2,622	72,280
May	3,177	4,376	98,323	3,176	4,376	98,273
June	3,550	4,355	106,094	3,546	4,355	105,975
July	2,866	3,391	89,189	2,863	3,391	89,082
August	3,500	4,412	108,472	3,496	4,412	108,382
September	2,818	3,618	84,531	2,815	3,618	84,456
October	2,416	2,641	74,943	2,414	2,626	74,883
November	2,284	2,481	68,502	2,282	2,481	68,457
December	2,378	2,687	73,715	2,376	2,687	73,640
Annual Total			993,662			992,858
Maximum		4,412			4,412	
Average	2,719			2,717		
% Capacity		53				
Permit to Take Water Limit		8,251*				
Municipal Drinking Water Licence Limit					8,251** 3,931***	

*Permit to Take Water allows two wells to operate simultaneously however, the daily total taking of water for any combination is limited to a maximum of 8,251 m³/day.

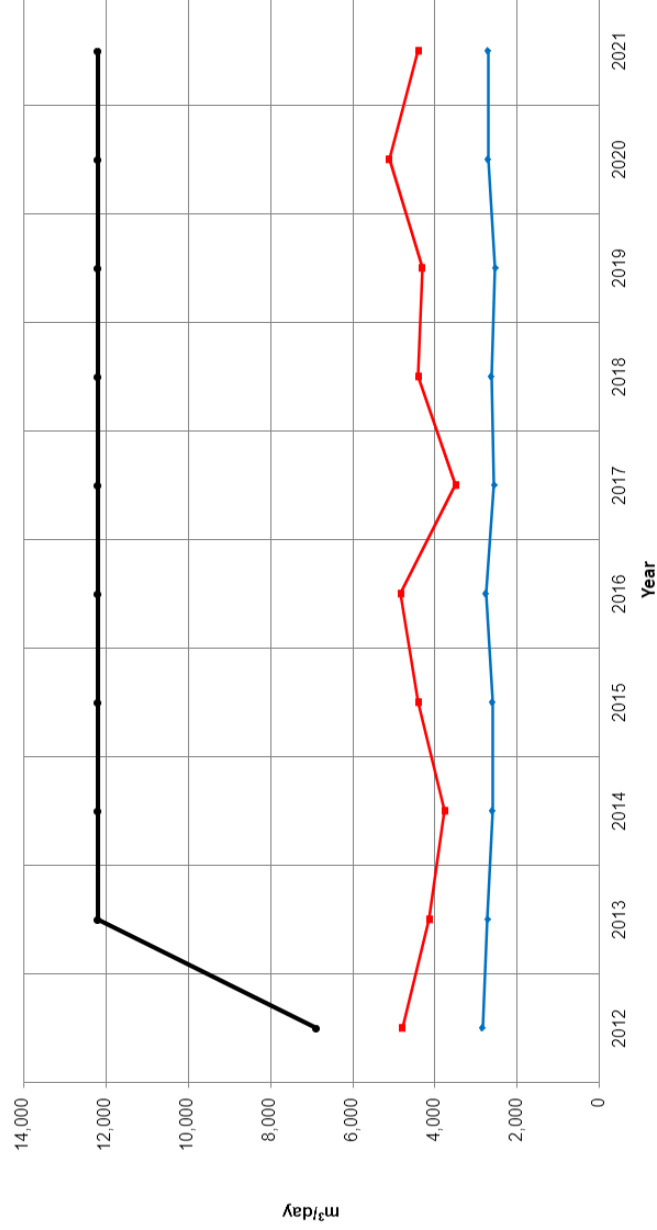
**8,251 m³/day is the rated capacity for Wells 5 and 7.

***3,931 m³/day is the rated capacity for Well 6.

The Regional Municipality of Durham Uxbridge Drinking Water System Capacity and Treated Water Flow Data

Year	Monthly Average Flow Cubic Metres per Day (m ³ /day) Pro-rated	Maximum Daily Flow (m ³ /day) Pro-rated	System Capacity (m ³ /day)
2012	2,846	4,796	6,877
2013	2,721	4,139	12,182
2014	2,605	3,760	12,182
2015	2,609	4,401	12,182
2016	2,772	4,839	12,182
2017	2,564	3,497	12,182
2018	2,630	4,401	12,182
2019	2,538	4,310	12,182
2020	2,711	5,109	12,182
2021	2,717	4,412	12,182

Uxbridge Drinking Water System Capacity and Treated Water Flow Graph



**The Regional Municipality of Durham
Whitby Drinking Water System
2021 Flow Data - Raw Process Water and Raw Industrial Water**

Month	Raw Process Water Monthly Average Flow Cubic Metres per Day (m ³ /day)	Raw Process Water Maximum Daily Flow (m ³ /day)	Total Raw Process Water Flow (m ³)	Raw Industrial Water Monthly Average Flow (m ³ /day)	Raw Industrial Water Maximum Daily Flow (m ³ /day)	Total Raw Industrial Water Flow (m ³)
January	53,349	57,863	1,653,824	5,136	10,404	159,201
February	54,782	53,255	1,491,152	4,742	5,748	132,771
March	52,697	54,733	1,633,600	5,212	5,982	161,566
April	52,678	54,251	1,580,342	4,871	5,491	146,131
May	58,771	73,802	1,821,891	5,218	8,239	161,761
June	67,576	87,704	2,027,278	5,755	9,352	172,655
July	57,733	75,947	1,789,734	5,730	9,890	177,621
August	62,660	78,749	1,942,469	4,063	10,723	125,952
September	54,718	61,214	1,641,542	6,394	10,677	191,835
October	53,109	59,584	1,646,375	5,059	7,257	156,824
November	52,679	54,027	1,580,360	3,767	5,305	113,024
December	51,754	58,770	1,604,359	2,333	9,306	123,527
Annual Total			20,412,926			1,822,868
Maximum		87,704			10,723	
Average	56,042			4,857		

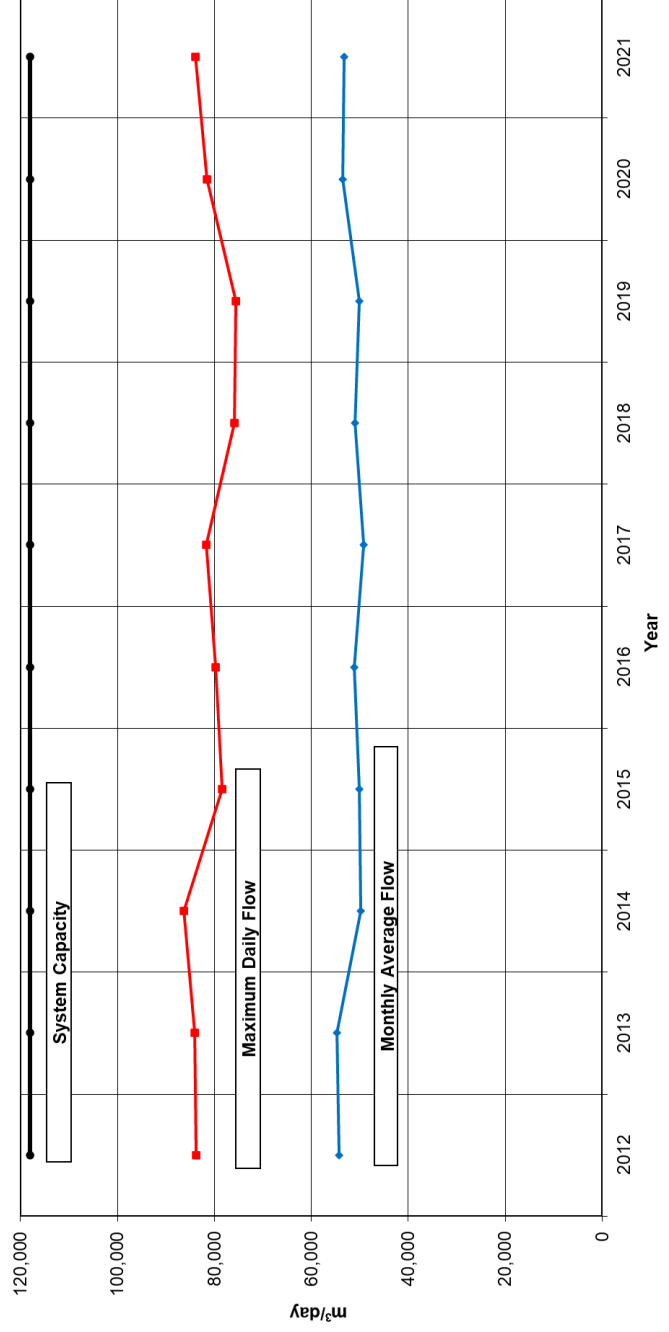
**The Regional Municipality of Durham
Whitby Drinking Water System
2021 Flow Data - Total Raw Water and Treated Water**

Month	Raw Water Monthly Average Flow Cubic Metres per Day (m ³ /day)	Raw Water Maximum Daily Flow (m ³ /day)	Total Raw Water Flow (m ³)	Treated Water Monthly Average Flow (m ³ /day)	Treated Water Maximum Daily Flow (m ³ /day)	Total Treated Water Flow (m ³)
January	58,820	64,544	1,823,434	50,159	53,851	1,554,925
February	58,381	60,470	1,634,658	50,106	50,961	1,402,964
March	58,250	60,519	1,805,741	50,017	52,025	1,550,513
April	57,857	59,212	1,735,711	50,091	51,998	1,502,743
May	64,317	81,002	1,993,837	55,112	70,445	1,708,468
June	73,671	96,851	2,210,128	63,076	83,975	1,892,286
July	63,775	81,479	1,977,018	54,293	71,508	1,683,092
August	67,012	84,518	2,077,357	59,584	76,053	1,847,114
September	61,484	68,434	1,844,514	52,461	58,837	1,573,832
October	58,483	64,003	1,812,975	51,576	57,173	1,598,869
November	56,776	59,310	1,703,285	51,593	53,472	1,547,781
December	55,981	63,666	1,735,420	51,143	57,190	1,585,428
Annual Total			22,354,078			19,448,015
Maximum		96,851			83,975	
Average	61,234			53,268		
% Capacity		67			71	
Permit to Take Water Limit		144,000				
Municipal Drinking Water Licence Limit					118,000	

The Regional Municipality of Durham Whitby Drinking Water System Capacity and Treated Water Flow Data

Year	Monthly Average Flow Cubic Metres per Day (m ³ /day)	Maximum Daily Flow (m ³ /day)	System Capacity (m ³ /day)
2012	54,348	83,824	118,000
2013	54,657	84,127	118,000
2014	49,822	86,351	118,000
2015	50,101	78,362	118,000
2016	51,136	79,744	118,000
2017	49,246	81,622	118,000
2018	50,954	75,943	118,000
2019	50,169	75,591	118,000
2020	53,472	81,583	118,000
2021	53,268	83,975	118,000

Whitby Drinking Water System Capacity and Treated Water Flow Graph



If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2022-W-15
Date: March 2, 2022

Subject:

Authorization of Subdivision Agreement with Beaverton Lake Homes Inc., Including Cost Sharing in Accordance with the Region Share Policy, for the Extension and Oversizing of Regional Services in the Township of Brock

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That financing estimated at \$987,300 for the Regional Municipality of Durham's share of the construction of sanitary sewers and watermains in the Township of Brock, at an estimated total project cost of \$4,992,700 be approved;
- B) That the Regional Municipality of Durham be authorized to enter into a subdivision agreement with a Regional Share payment to Beaverton Lake Homes Inc. estimated at \$987,300 for the construction of sanitary sewers and watermains in the Township of Brock, at an estimated total project cost of \$4,992,700;
- C) That financing for the subdivision agreement be provided from the following sources:

Developer's Share – Sanitary Sewer and Watermain

Beaverton Lake Homes Inc. \$3,261,900

Total Developer's Share \$3,261,900

Regional Share - Sanitary Sewer and Watermain

2022 Sanitary Sewerage System Capital Budget

Item 66: Sanitary Sewer on Concession Road 5 to service the westerly portion of the Beaverton Avenue Employment Area A, Brock

Servicing of Employment Lands and key Locations Reserve Fund (Project ID: D2040)	\$500,000
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Item 344: Allowance for Regional share for works in conjunction with residential development

Commercial Development Charge (Project ID: M2210)	\$192,249
Residential Development Charge (Project ID: M2210)	11,983
User Rate (Project ID: M2210)	<u>56,268</u>

Total Regional Sanitary Sewerage Financing	<u>\$760,500</u>
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2022 Water Supply System Capital Budget

Item 125: Watermain on Concession Road 5 to service the westerly portion of the Beaverton Avenue Employment Area A, Brock

Servicing of Employment Lands and Key Locations Reserve Fund (Project ID: D2040)	<u>\$226,800</u>
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Total Regional Water Supply Financing	<u>\$226,800</u>
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Total Regional Costs – Sanitary Sewer and Watermain	<u>\$987,300</u>
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Total Project Costs – Sanitary Sewer and Watermain	<u>\$4,992,700</u>
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Report:

1. Purpose

- 1.1 The purpose of this report is to seek approval to enter into a subdivision agreement with Beaverton Lake Homes Inc., including cost sharing in accordance with the Regional Municipality of Durham (Region) Share Policy related to the construction of sanitary sewers and watermains located on Thorah Concession Road 5 and Osborne Street (Regional Road 23), in the Township of Brock (Brock), as shown on Attachment #1.

2. Background

- 2.1 Beaverton Lake Homes Inc. is proposing to develop their property, located at the northeast corner of Osborne Street and Thorah Concession Road 5 in the community of Beaverton, in Brock. The Developer is proposing a 199-unit subdivision, known as Beaverton Lake Homes subdivision, which requires the extension of sanitary sewers and watermains for servicing.
- 2.2 The Region requested that the size and limits of the new sanitary sewer and watermain be increased to accommodate the future development of external lands.
- 2.3 The extension of the sanitary sewer and watermain on Thorah Concession Road 5 also forms part of the pre-servicing of the Beaver Avenue Employment Area A in Brock, as shown on Attachment #2.

3. Previous Reports and Decisions

- 3.1 Committee of the Whole Report #2020-COW-23, approved by Regional Council on September 30, 2020, authorized the Regional pre-servicing of designated employment areas.

4. Regional Infrastructure

- 4.1 To service the Beaverton Lake Homes Inc. property, a 450 millimetre (mm) sanitary sewer and a 300 mm watermain on Thorah Concession Road 5 is required. A 200 mm sanitary sewer is also required on Osborne Street. The extension of these services is shown on Attachment #1. The sanitary sewer and watermain on Thorah Concession Road 5 have been sized to accommodate the future development of external lands, including the Beaver Avenue Employment Area A as shown on Attachment #2.
- 4.2 The costs for all internal sanitary sewer and watermain servicing of the Beaverton Lake Homes subdivision will be the full responsibility of developer. The external servicing required to service the subdivision meets the criteria for abutting and oversizing as outlined in the Region's Share Policy for Regional Services.

Thorah Concession Road 5, Downstream (West) of the Site

- 4.3 The Region's Share Policy states that the developer is responsible to pay for the construction of all Regional infrastructure needed to service their lands. The Region is responsible for the balance of the costs, including the oversizing of

pipes. In this case, Beaverton Lake Homes Inc. would be responsible to pay 100 percent of the cost to construct a 250 mm sanitary sewer downstream of their property on Thorah Concession Road 5, from the Lake Simcoe Water Pollution Control Plant to Osborne Road, which is the minimum size required by the development. The Region would be responsible to pay for the cost of oversizing the sanitary sewer to a 450 mm diameter.

Thorah Concession Road 5, Abutting the Site

- 4.4 The Region's Share Policy for Regional Services indicates that in the case of abutting services with direct benefit to adjacent lands, the developer shall fund 50 percent of the cost of the minimum size, with the Region responsible to pay the balance of the costs. In this case, Beaverton Lake Homes Inc. would be responsible to pay 50 percent of the cost to construct a 250 mm sanitary sewer and a 150 mm watermain on Thorah Concession Road 5.
- 4.5 The Region would be required to pay for the remaining 50 percent of the cost, plus oversizing, as the lands abutting the sanitary sewer and watermain will be subject to future development plans by others.

Osborne Road, Abutting the Site

- 4.6 The Region's Share Policy for Regional Services indicates that in the case of abutting services with direct benefit to adjacent lands, the developer shall fund 50 percent of the cost of the minimum size, with the Region responsible to pay the balance of the costs. In this case, Beaverton Lake Homes Inc. would be responsible to pay 50 percent of the cost to construct the 200 mm sanitary sewer on Osborne Street, which is the minimum size required by the development.
- 4.7 The Region would be required to pay for the remaining 50 percent of the cost as the lands abutting the sanitary sewer will be subject to future development plans by others.
- 4.8 All other requirements of the Regional subdivision agreement will be in place, including the posting of a letter of credit for 100 percent of the cost of the works, Regional inspection requirements and the two-year infrastructure maintenance period.

5. Financial Implications

- 5.1 The financing of \$4,992,700 million, including the Developer's share of \$3,261,900 for the cost of the work, including engineering, contingencies and tax can be provided as follows:

Developer's Share – Sanitary Sewer and Watermain

Beaverton Lake Homes Inc.	<u>\$3,261,900</u>
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Total Developer's Share	<u>\$3,261,900</u>
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Regional Share - Sanitary Sewer and Watermain

2022 Sanitary Sewerage System Capital Budget

Item 66: Sanitary Sewer on Concession Rd. 5 to service the westerly portion of the Beaverton Avenue Employment Area A, Brock

Servicing of Employment Lands and Key Locations Reserve Fund (Project ID: D2040)	\$500,000
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Item 344: Allowance for Regional share for works in conjunction with residential development

Commercial Development Charge (Project ID: M2210)	\$192,249
Residential Development Charge (Project ID: M2210)	11,983
User Rate (Project ID: M2210)	<u>56,268</u>

Total Regional Sanitary Sewerage Financing	<u>\$760,500</u>
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2022 Water Supply System Capital Budget

Item 125: Watermain on Concession Rd. 5 to service the westerly portion of the Beaverton Avenue Employment Area A, Brock

Servicing of Employment Lands and Key Locations Reserve Fund (Project ID: D2040)	<u>\$226,800</u>
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Total Regional Water Supply Financing	<u>\$226,800</u>
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Total Regional Costs – Sanitary Sewer and Watermain	<u>\$987,300</u>
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Total Project Costs – Sanitary Sewer and Watermain	<u>\$4,992,700</u>
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6. Relationship to Strategic Plan

- 6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Goal 2: Community Vitality
Priority 2.1 - Revitalize existing neighbourhoods and build complete communities that are walkable, well-connected, and have a mix of attainable housing.
 - b. Goal 3: Economic Prosperity
Priority 3.1 - Position Durham Region as the location of choice for business.
 - c. Goal 5: Service Excellence
Priority 5.1 - Optimize resources and partnerships to deliver exceptional quality services and value.

7. Conclusion

- 7.1 It is recommended that the Regional Municipality of Durham enter into a subdivision agreement with Beaverton Lake Homes Inc. containing the foregoing provisions.
- 7.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendation.
- 7.3 For additional information, please contact Jeff Almeida, Development Approvals Supervisor, at 905-668-7711, extension 3721.

8. Attachments

Attachment #1: Location Plan – Beaverton Lake Homes Inc.

Attachment #2: Township of Brock – Beaver Avenue Employment Area

Respectfully submitted,

Original signed by:

Susan Siopis, P.Eng.
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer

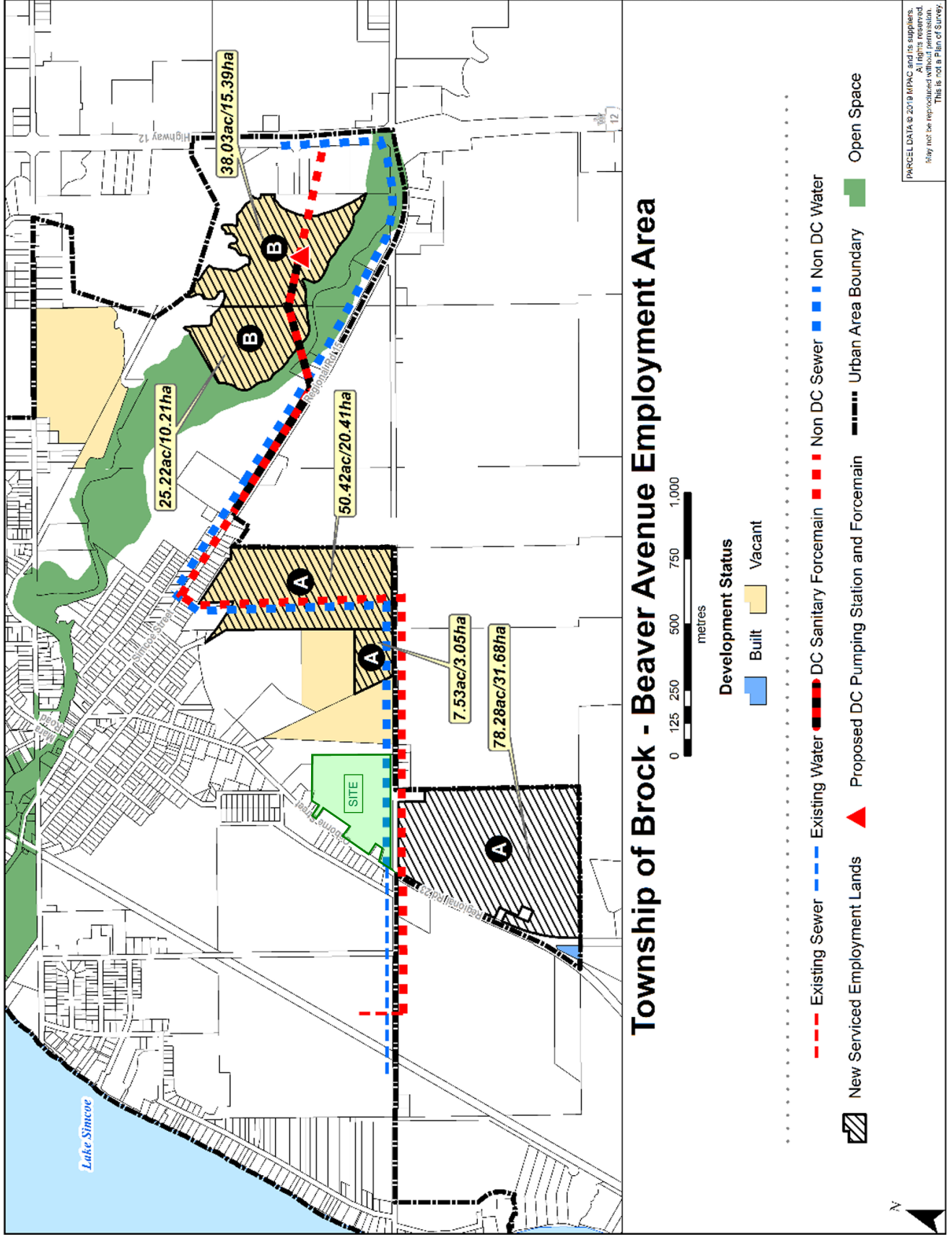


Attachment #1: Location Plan – Beaverton Lake Homes Inc.



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Attachment 2: Township of Brock - Beaver Avenue Employment Area



If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2022-W-16
Date: March 2, 2022

Subject:

Ontario Government – Improving Wastewater and Stormwater Discharges in Lake Ontario Program

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That the one-time Ontario funding in the amount of \$836,590, approved for the Region of Durham's (Region) Improving Wastewater and Stormwater Discharges in Lake Ontario program project, be accepted;
- B) That the Regional Chair and Clerk be authorized to approve and pass any required by-law authorizing the municipality to enter into the funding agreement with the Provincial Government and by authorized to approve and execute any agreements or other related documents required by the Province;
- C) That the Government of Ontario be respectfully requested to extend the timelines under the program guidelines for Improving Wastewater and Stormwater Discharges in Lake Ontario Fund Program, to beyond March 31, 2024 in order to acknowledge the existing industry challenges municipalities will face in ensuring the project is substantially completed within the program deadline; and
- D) That the unbudgeted works for effective process control and infrastructure upgrades to reduce the likelihood of potential overflows, bypasses, and lower phosphorus discharge be approved and added to the scope of work for the Newcastle Water Pollution Control Plant project and the Commissioners of Works

and Finance be authorized to execute any agreements related to the project approved under Improving Wastewater and Stormwater Discharges in Lake Ontario Program.

Report:**1. Purpose**

- 1.1 The purpose of this report is to inform Regional Council of the Ministry of the Environment, Conservation and Parks Ontario's (MECP) Improving Wastewater and Stormwater Discharges in Lake Ontario Program and to seek authorization for the Regional Chair and Clerk to execute the required by-law authorizing the municipality to enter into the funding agreement with the Province. The authorization by-law must be executed and submitted to the Province by March 31, 2022, along with the corresponding funding agreement to be signed by the Commissioner of Finance.

2. Background

- 2.1 In 2020 the Government of Ontario established the Improving Wastewater and Stormwater Discharges in Lake Ontario Fund Program in the provincial budget and committed \$15 million of capital funding for the improving wastewater and stormwater discharges in Lake Ontario basin.
- 2.2 The \$15 million Improving Wastewater and Stormwater Discharges in Lake Ontario Fund Program was allocated by using a formula that had a fixed amount (\$500,000) and a variable amount based on the capacity of municipal sewage treatment plants.
- 2.3 The funding is not intended to cover the full cost of implementing overall improvements to Lake Ontario water quality, but rather contribute to local improvements.
- 2.4 The desired outcome of the projects will be to improve municipal wastewater and stormwater systems to lower phosphorus discharges from municipal wastewater and stormwater, reduce the likelihood of sewage overflows and bypasses; and/or improve the quality of stormwater discharges.
- 2.5 The Region was advised on December 17, 2021, that its share of the Improving Wastewater and Stormwater Discharges in the Lake Ontario Fund Program from the Government of Ontario would be \$836,590 for eligible project costs.

3. Region Program Submission

- 3.1 The process optimization upgrades at the Newcastle Water Pollution Control Plant (WPCP) has been identified as a project that aligns with the MECP program timelines and objectives to improve water quality in Lake Ontario. An Environmental Assessment Amendment is currently underway, and the pre-design work has commenced for the improvements to the WPCP's performance, reliability, and flexibility as well as to increase and optimize treatment capacity. The additional funding will be utilized in the selection, design, and construction of effective process control and infrastructure upgrades required to reduce the likelihood of potential overflows, bypasses and lower phosphorus discharge.
- 3.2 The preliminary work completed has identified upgrades required to the raw sewage pumping system, the screening and grit systems, the odour control system, primary and secondary clarifier mechanisms, recycled activated sludge and waste activated sludge pumping systems, blowers, phosphorous removal chemical system and disinfection system. Additionally, this project will reroute the stormwater connection to the adjacent stormwater pond.
- 3.2 The majority of specialized wastewater equipment is not manufactured locally. Equipment orders require long lead times to manufacture and deliver to the project site. Based on the current supply chain and logistic challenges within the infrastructure industry, staff recommend that the province consider project deadline extensions beyond March 31, 2024, if required due to conditions beyond the control of the Region.

4. Financial Implications

- 4.1 In accordance with section 14.2 of the Region's Budget Management Policy, it is recommended that the unbudgeted process optimization upgrades be approved and added to the scope of work being undertaken at the Newcastle Water Pollution Control Plant, with one-time provincial funding from the Improving Wastewater and Stormwater Discharges in Lake Ontario Program grant, in the amount of \$836,590.

5. Relationship to Strategic Plan

- 5.1 This report aligns with the following strategic goals and priorities in the Region's Strategic Plan namely:
- a. Goal 1: Environmental Sustainability

- b. Goal 2: Community Vitality
- c. Goal 3: Economic Prosperity
- d. Goal 4: Social Investment
- e. Goal 5: Service Excellence

6. Conclusion

- 6.1 The Regional Municipality of Durham will accept the one-time Ontario funding in the amount of \$836,590, approved for the Regional Municipality of Durham's Improving Wastewater and Stormwater Discharges in Lake Ontario program project. To receive funding, the Regional Municipality of Durham must submit a signed funding agreement, along with the authorization by-law, to the Province by March 31, 2022.
- 6.2 In addition, it is recommended that the Government of Ontario be respectfully requested to acknowledge the existing industry challenges municipalities will face in ensuring the project is substantially completed within the program deadline by extending the timelines under the program guidelines for Improving Wastewater and Stormwater Discharges in Lake Ontario Fund Program, to beyond March 31, 2024, if required.
- 6.3 This report has been reviewed by the Finance Department and the Legal Services Division of the Corporate Services Department.
- 6.4 For additional information, contact: Darlene Rumball, Policy Analyst, Engineering Planning & Studies Division at 905-668-7711, extension 3522.

Respectfully submitted,

Original signed by:

Susan Siopis, P.Eng.
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2022-W-17
Date: March 2, 2022

Subject:

Standardization of Air Conditioning Equipment Manufactured by Liebert for the Durham Regional Police Service Facilities

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That air conditioning equipment manufactured by Liebert be approved as the standard to match systems installed at Durham Regional Police Service facilities where currently installed for a period of ten years; and
 - B) That Liebert Air Conditioning Equipment be included in tender specifications for Durham Regional Police facilities where appropriate.
-

Report:

1. Purpose

1.1 This report requests approval for product standardization for the replacement of three air conditioning units manufactured by Liebert to match systems installed at Durham Regional Police Service (DRPS) facilities where currently installed.

2. Background and Justification for Standardization

2.1 Liebert Heating, Ventilating and Air Condition (HVAC) equipment is currently installed in the Durham Regional Police Service (DRPS) IT server rooms at Central East Division in the City of Oshawa, the Operations Training Centre in the Town of Whitby and the East Division in the Municipality of Clarington. IT server rooms contain essential servers, telephony and radio equipment that support

DRPS' policing and administrative operations on a 24-hour, seven day per week basis. The ability for the HVAC equipment to provide an environment that has continuous temperature and humidity levels is critical for the operation of this technology.

- 2.2 Because of their crucial importance, air conditioning equipment within server rooms must be reliable and serviceable over their lifecycle. When a failure occurs, staff must be able to reinstate operation of this critical equipment quickly. Standardizing to one manufacturer ensures that staff are not required to be trained on the operation and maintenance of equipment supplied by various manufacturers, spare parts are efficiently managed for rapid response to failure and limited contracts for support are required.
- 2.3 Along with DRPS, the Regional Police Services of Peel, York and Halton also use Liebert HVAC units within their server rooms. DRPS has not experienced issues with serviceability, parts, software or warranty claims with its existing Liebert products. As Liebert equipment has proven to be reliable and easily serviced, DRPS has requested that the units currently being replaced at the Central East Division by Works Department Design, Construction and Asset Management staff and that future purchases, where applicable and appropriate, be standardized to Liebert models.
- 2.4 Works Department Design, Construction and Asset Management staff are currently in the process of preparing tender documentation for the replacement of three Liebert HVAC units for the server room at the Central East Division located at 77 Centre Street North in the City of Oshawa. The estimated cost for the Liebert units is \$150,000 excluding applicable taxes. The total project cost is estimated at \$537,400. Liebert units will be specified in the competitive tender documents for this project once standardization approval has been received.

3. Financial Implications

- 3.1 Section 7 of the Region's Purchasing By-Law 16-2020 allows for sole source purchases and requires Council approval where the sole source purchase exceeds \$100,000. Appendix C, article 1.1 of By-law 16-2020 supports the sole source agreements as the permitted goods or services can be supplied by a particular supplier and no reasonable alternative or substitute goods or services exist to ensure compatibility with existing goods, or to maintain specialized goods that must be maintained by the manufacturer of those goods or its representative.

3.2 Financing for the replacement of three Liebert HVAC units is available from within the approved project budget (Project G2021).

4. Relationship to Strategic Plan

4.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

a. Goal #5 – Service Excellence:

- Optimize resources and partnerships to deliver exceptional quality services and value.

5. Conclusion

5.1 It is recommended that Regional Council approve the product standardization for air conditioning units manufactured by Liebert to be included in tender specifications for Durham Regional Police facilities where appropriate.

5.2 This report has been reviewed by the Finance Department and Durham Regional Police Service staff.

5.3 For additional information, contact: Jenni Demanuele, Director, Business Services at 905-668-7711, extension 3456.

Respectfully submitted,

Original signed by:

Susan Siopis, P.Eng.
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer



The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2022-W-18
Date: March 2, 2022

Subject:

Road Rationalization: Transfer of Roads Between the Regional Municipality of Durham and the Town of Whitby

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That the Town of Whitby Report # PW-29-19 (Attachment #1) approved by Whitby Council on October 28, 2019, be received for information;
- B) That in keeping with the intent of the Road Rationalization Plan to realign responsibility for the road network between the Regional Municipality of Durham and the Local Area Municipalities, By-law #22-2018 be amended to give effect to the jurisdictional transfers described below and that Regional staff be authorized to execute all agreements and take all steps necessary to give effect thereto, including, but not limited to any fee simple transfers of subject road network property PINS to correspond and synchronize ownership of the road network with any jurisdictional transfers of the road network:
 - Cochrane Street (Regional Road 43) from Dundas Street to Rossland Road (Regional Road 28) including the CP Rail structure which is in the Regional Municipality of Durham's Capital Program for replacement, and Henry Street (Regional Road 45) from Victoria Street (Regional Road 22) to Dundas Street, from the Regional Municipality of Durham to the Town of Whitby, effective July 1, 2022; and

- Rossland Road from Des Newman Boulevard to Cochrane Street (Regional Road 43), from the Town of Whitby to the Regional Municipality of Durham, effective July 1, 2022;
- C) That the responsibility for the maintenance of Rossland Road from Lake Ridge Road (Regional Road 23) to Des Newman Boulevard, the segment that is under Ministry of Transportation of Ontario's ownership, be transferred from the Town of Whitby to the Regional Municipality of Durham, effective July 1, 2022;
- D) That the Region's commitment to replace the CP Rail structure on Cochrane Street (Regional Road 43), in the 2022/23 timeframe (i.e., after the proposed transfer date), be acknowledged;
- E) That Regional staff continue to advance further discussions with applicable Local Area Municipalities to realize full road rationalization within the Regional Municipality of Durham; and
- F) That a copy of this report be forwarded to the Town of Whitby and the Ministry of Transportation of Ontario.
-

Report:

1. Background

- 1.1 The Regional Municipality of Durham (Region) and Town of Whitby (Whitby) staff have engaged in discussions over the last several years related to a Roads Network Rationalization Plan that included realigning responsibility of the road network between the Region and the Local Area Municipalities (LAMs).
- 1.2 In March 2018, Information Report #2018-INFO-31 was issued to update Regional Council on the findings to date of the Region-wide Road Network Rationalization Study. On the basis of sound transportation planning criteria outlined below, the report identified candidate road segments for jurisdictional transfer in the short-term and highlighted segments proposed for future consideration:
- a. Connection with the provincial and/or inter-regional network
 - b. Volume of inter-municipal and regional traffic on the road
 - c. Volume of traffic relative to adjacent roads
 - d. Level of access control
 - e. Role in supporting regional goods movement/aggregate hauling
 - f. Role in supporting major transit route and/or planned rapid transit route
 - g. Role in supporting region-wide economic and growth objectives

- h. Effects on corridor planning or planning of downtowns or mature urban areas
 - i. Potential environmental and community impact due to change in road function
 - 1.3 Information Report #2018-INFO-31 acknowledged that transfer opportunities in each LAM have unique considerations that will require further discussion.
 - 1.4 In September 2018, Information Report #2018-INFO-138 (Attachment #2) was issued to update Regional Council on further meetings/exchanges with LAM staff and to document a summary of staff-level views and consensus elements on the proposed short-term transfers. The report noted that upon receipt of comments from the participating LAM's, specific to their candidate roads identified for transfer in the short-term, Regional staff would report back on a recommended implementation plan and timeline for the transfers.
 - 1.5 In late 2019, Whitby Council through staff Report PW 29-19 (Attachment #1) resolved "That the Town formalize an agreement with the Region of Durham regarding road rationalization/transfer of the following road segments effective May 1, 2020:
 - a. Rossland Road between Lake Ridge Road and Cochrane Street;
 - b. Cochrane Street between Dundas Street and Rossland Road excluding the limits of the rail bridge; and,
 - c. Henry Street between Victoria Street and Dundas Street."
 - 1.6 At the time of the 2019 Whitby Council resolution, there were two outstanding matters requiring resolution. First, the Town's newly widened portions of Rossland Road were yet to be resurfaced with top asphalt. This work is now complete. Secondly, the decision on whether to rehabilitate, partially replace or replace the CP Rail bridge structure on Cochrane Street (Regional Road 43) was pending. With full replacement of the structure determined as the preferred option, detail design is now well in progress with the active engagement of Town staff, with construction planned for the 2022/23 timeframe. The Region remains committed to constructing and funding the replacement of the CP Rail structure. As a result, the Region and Town are now able to proceed with the first set of transfers.
- 2. Recommended Road Transfers**
- 2.1 Further to the transfer candidates identified in Report #2018-INFO-138 (Attachment #2), consideration of Whitby Council's resolution of October 28, 2019, and the recent meetings and discussions with Whitby staff, it is recommended that the first set of road candidates as detailed in Table 1 below be

transferred effective July 1, 2022.

Table 1: Recommended Road Transfer Candidates (July 1, 2022)

	Length (Kilometres)	Lane- Kilometres	Number of Structures	Structure Area (Square Metres)	Number of Signalized Intersections
Durham Region to Town of Whitby Transfers					
Cochrane Street (Regional Road 43) from Dundas Street to Rossland Road (Regional Road 28)	2.1	6.1	1	885	2
Henry Street (Regional Road 45) from Victoria Street (Regional Road 22) to Dundas Street	2.1	5.9	1	662	3
Total	4.2	12.0	2	1,547	5
Town of Whitby to Durham Region Transfers					
Rossland Road from Lake Ridge Road to Des Newman Boulevard (Operation and Maintenance Responsibilities Only)	0.8	3.5	-	-	-
Rossland Road from Des Newman Boulevard to Cochrane Street (Regional Road 43)	2.1	9.3	4	2,068	4
Total	2.9	12.8	4	2,068	4
The above figures represent preliminary asset inventory information, subject to further investigation.					
Regional structures included in the proposed transfer:					
Cochrane St. CPR Overpass: 885 square metres, planned for replacement by Region in 2022/2023					
Henry St. CNR Overpass: 662 square metres, constructed in 1967 (i.e. approximately 55 years old)					
(Henry St. GO Transit Overpass: N/A as GO Transit has maintenance responsibility)					
Town of Whitby structures included in the proposed transfer:					
Rossland Rd. Culvert: 300 square metres, constructed in 2018 (i.e. approximately 4 years old)					
Rossland Rd. CPR Overpass: 1,340 square metres, constructed in 2002 (i.e. approximately 20 years old)					
Puckrin Bridge: 209 square metres, constructed in 1983 (i.e. approximately 39 years old)					
East Twin Stream Bridge: 219 square metres, constructed in 1990 (i.e. approximately 32 years old)					

2.2 A location map identifying the recommended roads transfer is included in Attachment #3.

2.3 Rossland Road from Lake Ridge Road to Des Newman Blvd is currently owned by the Province of Ontario due to Highway 412 construction and is expected to remain with the Province due to the planned future interchange at Highway 412.

Due to the Province's requirements for the municipality to maintain the roadway that travels over the highway, maintenance responsibilities for this section of Rossland Road will be transferred from the Town of Whitby to the Region.

2.4 Other future proposed road transfer candidates include:

Table 2: Proposed Future Road Transfer Candidates

Reg. Rd. #	Road Name	From	To	CL Length (km)	# of lanes	Lane-km
22	Victoria Street (old alignment)	0.7 km West of Thickson Road	0.4 km West of Thickson Road	0.3	2/3	0.8
46	Brock Street	Water Street	Victoria Street	1.0	2	2.0
46	Brock Street	Victoria Street	South Limit of Highway #401	0.3	5	1.5
Former 23	Lake Ridge Road (North)	Almond Avenue	Cresser Avenue	0.3	2	0.6
Local to Region	Dundas Street	Fothergill Court	200 m west of Cochrane Street	1.1	4/5	5.1
Local to Region	Dundas Street	200 m east of Garden Street	Whitby/Oshawa Boundary	2.7	4/5	13.2

3. Financial Implications

3.1 The primary objective of the recommended and proposed transfers is to establish the proper jurisdiction for these roads to maximize the overall efficiency of the road network in the Region. As the transfers are completed, it is expected that both the Region and the participating LAM will respectively integrate the capital, asset management, maintenance and operating cost obligations that accrue from these transfers into their business planning processes. This will include, but not be limited to, road and structural rehabilitations and expansions, traffic control device installations and upgrades, active transportation upgrades and asset inspections, all taking guidance from respective established/approved policies and practices.

3.2 Considering current pavement condition, it is not anticipated that there will be significant road rehabilitation expenses associated with the Rossland Road

segment proposed for transfer to the Region, within the next ten years. There are four structures on the Rossland Road segment proposed for transfer, which range in age from four to 39 years. Regional assessment of the condition of these structures will be necessary to understand what structure replacement and rehabilitation expenses the Region may face in the future for inclusion in future long-term capital planning and forecasts.

- 3.3 Additional funding of \$2.6 million for the replacement of the CP Rail structure on Cochrane Street, rated in Fair condition, was approved as part of the 2022 Regional Business Plans and Budgets, bringing the total Cochrane Street bridge replacement project budget to \$9.3 million including an anticipated contribution from CP Rail.
- 3.4 Whitby has historically performed winter maintenance on Cochrane Street and Henry Street (Regional Road 45) on the Region's behalf and invoiced the Region on a time and material basis. After the July 1, 2022 transfer date, Whitby will continue the winter maintenance on these streets at its own cost. With the transfer of Rossland Road to the Region, the Region will assume and complete the winter maintenance on this road segment from Lake Ridge Road (Regional Road 23) to Cochrane Street.
- 3.5 Based on typical benchmarking cost estimates for winter maintenance, road-side operating costs and paved road operating costs, it is anticipated there will be a slight increase in Regional costs.
- 3.6 At signalized intersections where all intersecting roads are LAM roads, the Region operates and maintains the traffic signal with the costs charged back to the LAM. With the recommended July 1, 2022 transfer candidates, there will be five traffic signals impacted (Attachment #3) for which operating and maintenance costs will be charged back to Whitby:
 - Cochrane Street at Dundas Street
 - Cochrane Street at Bonacord Avenue/Vernon Street
 - Henry Street at the GO Station entrance
 - Henry Street at Burns Street
 - Henry Street at Dundas Street
- 3.7 At signalized intersections between Regional road(s) and LAM road(s), the Region typically operates and maintains the traffic signals at its own cost. With the recommended July 1, 2022 transfer candidates, the funding for operation and

maintenance of four traffic signals (Attachment #3) will become the Region's responsibility:

- Rossland Road at Des Newman Boulevard
- Rossland Road at McQuay Boulevard
- Rossland Road at Coronation Road
- Rossland Road at Country Lane

3.8 On a go-forward basis, the Region and the Town of Whitby will include the rationalized road segments in their respective business plans and budgets for any future road work.

4. Relationship to Strategic Plan

4.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

- a. Goal 5: Service Excellence – to provide exceptional value to Durham taxpayers through responsive, effective and fiscally sustainable service delivery.
 - Priority 5.1 – Optimize resources and partnerships to deliver exceptional quality services and value.
 - Priority 5.2 – Collaborate for a seamless service experience.

5. Conclusion

5.1 It is recommended that Cochrane Street from Dundas Street to Rossland Road (Regional Road 28) and Henry Street from Victoria Street (Regional Road 22) to Dundas Street be transferred from the Regional Municipality of Durham to the Town of Whitby, and that Rossland Road from Des Newman Boulevard to Cochrane Street be transferred from the Town of Whitby to the Regional Municipality of Durham and the operating responsibilities for Rossland Road from Lake Ridge Road to Des Newman Boulevard (which is owned by the Province) be transferred from the Town of Whitby to the Regional Municipality of Durham, effective July 1, 2022.

5.2 As indicated in the recommendations to this report, to affect the road transfers as described, By-law Number 22-2018 will be amended.

5.3 Regional staff will continue discussions with applicable Local Area Municipalities

regarding potential future road transfers to achieve road rationalization.

- 5.4 Upon receipt of comments from the participating Local Area Municipalities, specific to their candidates identified for transfer in the short-term, Regional staff will report back on a recommended implementation plan and timeline for the transfers.
- 5.5 The Regional Municipality of Durham's Finance and Legal Departments have reviewed this report. Senior Whitby staff were actively and collaboratively engaged and are in alignment with the recommendations of this report.

6. Attachments

Attachment 1: [Town of Whitby Road Rationalization Report #PW 29-19 dated October 21, 2019](https://calendar.durham.ca/meetings/Detail/2019-12-04-0930-Works-Committee-Meeting/19534380-ce8d-4b7b-88a0-ab140095417b) (Item 7.1 A on Pages 31 to 41 of 121 at <https://calendar.durham.ca/meetings/Detail/2019-12-04-0930-Works-Committee-Meeting/19534380-ce8d-4b7b-88a0-ab140095417b>)

Attachment 2: [Information Report #2018-INFO-138 dated September 28, 2018](https://www.durham.ca/en/regional-government/resources/Documents/Council/CIP/CIP-2018/CIP-09282018.pdf) – (Pages 3 to 33 of 67 at <https://www.durham.ca/en/regional-government/resources/Documents/Council/CIP/CIP-2018/CIP-09282018.pdf>)

Attachment 3: Road Rationalization Transfer Map

Respectfully submitted,

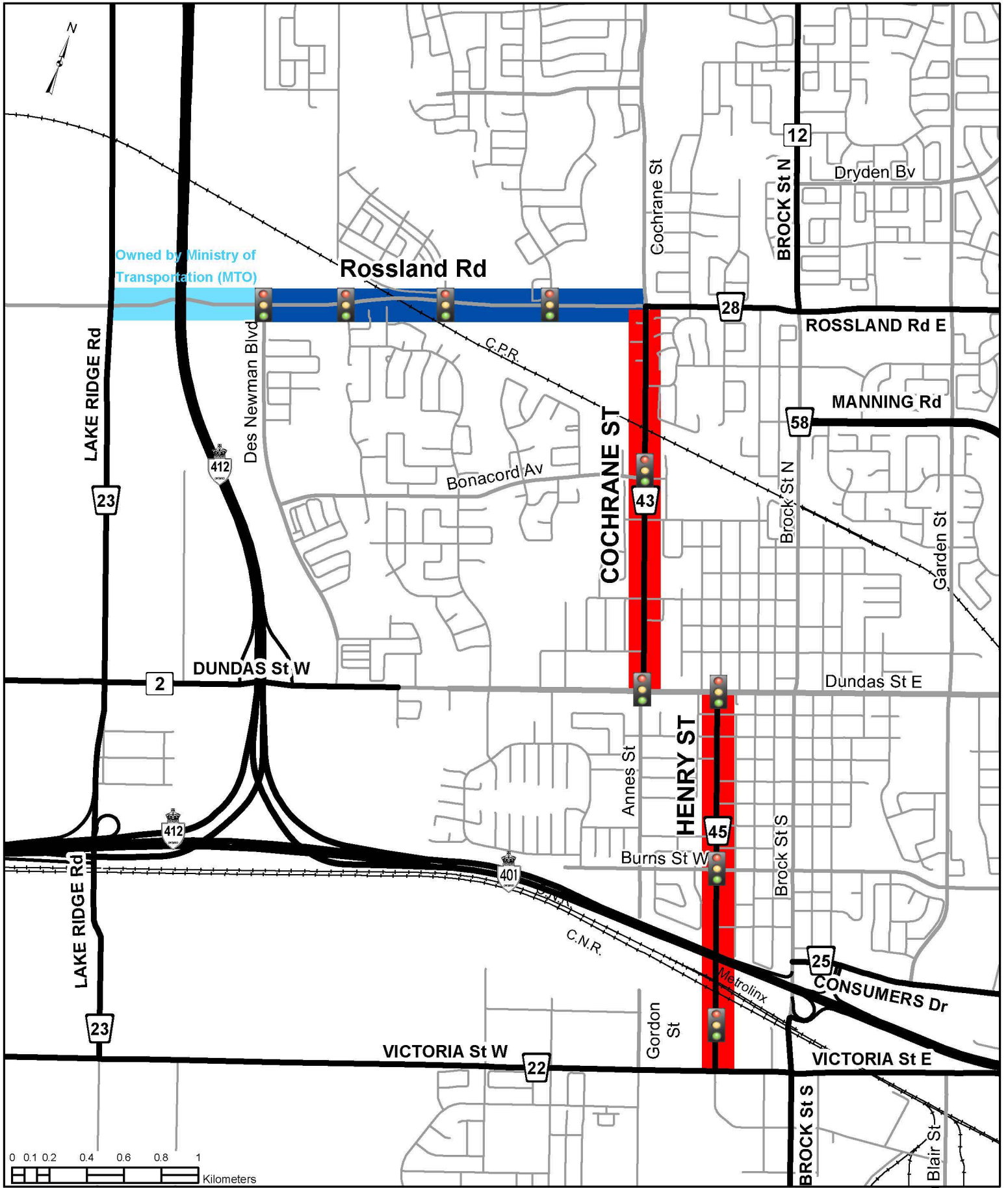
Original signed by:

Susan Siopis, P.Eng.
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer



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Road Rationalization Transfer Map

- Legend**
- From Region to Town
 - From Town to Region
 - Maint./Op's to Region
 - Subject Traffic Signal