

February 9<sup>th</sup>, 2022

Lisa Higgs  
CAO/Clerk  
Corporation of the Township of Southwold  
35663 Fingal Line  
Fingal, ON N0L 1K0

**Re: Annual Summary Report as required by Safe Drinking Water Act**

Dear Ms. Higgs;

Attached is the 2021 Summary Report for the Southwold Distribution System for January 1<sup>st</sup> to December 31<sup>st</sup>, 2021. This report is completed in accordance with Schedule 22 of O. Reg. 170/03, under the Safe Drinking Water Act.

This Summary Report is to be provided to the members of the Southwold Municipal Council. Please ensure this distribution by March 31, 2022.

Section 12 of O. Reg. 170/03, requires the Annual Report required under Section 11 of O. Reg. 170/03 and the Summary Report be made available for inspection by any member of the public during normal business hours, without charge. The reports should be made available for inspection at the office of the township, or at a location that is reasonably convenient to the users of the water system.

Please feel free to contact me should you require any additional information regarding these reports. I can be reached at 226-374-4349.

Sincerely,



Maegan Garber  
Process and Compliance Technician (OCWA)

cc. Mark Harris, Senior Operations Manager (OCWA)  
Dale LeBritton, Regional Hub Manager (OCWA)  
Cindy Sigurdson, Safety, Process and Compliance Manager (OCWA)  
Pete Kavcic, Director of Infrastructure & Development Service (Southwold)



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

**Annual Summary Report**  
**For the**  
**Southwold Distribution System**  
**2021**

Prepared for the Township of Southwold

By the Ontario Clean Water Agency

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3	<b>Corrective Actions</b> Schedule 22-2 (2)(b) For each requirement referred to in section 2 that was not met, specify the duration of the failure and the measures that were taken to correct the failure.	1
4	<b>Flow Summary</b> Schedule 22-2 (3) 1. A summary of the quantities and flow rates of the water supplied during the period covered by the report 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 licence, 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.	1
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## **SECTION 1: Overview**

This summary report for the Southwold Distribution System (DS) is published in accordance with Schedule 22 of Ontario's Drinking Water Systems Regulation for the reporting period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2021. The Southwold DS is categorized as a Large Municipal Residential Drinking Water System.

The Southwold DS operated in accordance with the Municipal Drinking Water Licence 055-101 and Drinking Water Works Permit 055-201.

This report was prepared by the Ontario Clean Water Agency on behalf of the Township of Southwold and must be supplied to the Southwold Municipal Council by March 31, 2022.

## **SECTION 2: Compliance**

The Southwold DS was operated and maintained in such a manner that treated water supplied to the consumers serviced by the system satisfied the Ontario Drinking Water Quality Standards.

The annual routine inspection of the Southwold Distribution System on September 7<sup>th</sup>, 2021, conducted by Angela Stroyberg of the Ministry of the Environment, Conservation and Parks (MECP) identified no non-compliances.

There were no adverse water quality incidents (AWQIs) that occurred in 2021.

## **SECTION 3: Corrective Action**

The routine MECP Inspections have an Inspection Rating Record, which evaluates the system to provide information for the owner/operator on areas that need to be improved. The particular areas that were evaluated for the Southwold Distribution Supply System were: Treatment Process, Operations Manuals, Logbooks, Certification and Training, Water Quality Monitoring, and Reporting and Corrective Actions. This system received 0 out of 277 non-compliance ratings and as such received 100% for the Final Inspection Rating.

## **SECTION 4: Summary and Discussion of Quantity of Water Supplied**

In accordance with Schedule 22-2(3) find a summary and discussion of the quantity of water supplied during the reporting period. There are no rated capacities specified in the MDWL or DWWP.

The Southwold Distribution System is supplied from the St. Thomas Area Secondary Water Supply System. The flow is metered at three locations in the system:

1. Talbot Line and Ford Line
2. Talbot Line and Ford Line (Talbotville)
3. Wonderland Road and Clinton Line

The Southwold Distribution System provides water to the following systems:

1. Dutton Dunwich Distribution System (Talbot Line and Iona Road)
2. St. Thomas Distribution System (Fingal Line)
3. Middlesex Centre (Southdel Drive)

In 2021, the total flow through the Southwold DS was 594,390m<sup>3</sup>. Therefore, the flow has increased 84.3% in 2021 compared to 2020. In 2020, there was a large reduction in flows from the previous year as a result of an isolation valve on the by-pass line being left partially open at the Southwold Interconnect Chamber for the majority of the year (2020). This was discovered by staff from the St. Thomas Secondary System late in 2020 and was resolved. The large increase in flow in 2021 compared to 2020 is a result of this. When comparing the total flow through the Southwold DS in 2021 to 2019 there has been an increase of 4.8%. During 2021 and 2019, the isolation valve on the by-pass line was closed and flows are seen to be comparable. The average daily flow to Southwold Distribution System in 2021 was 1,598m<sup>3</sup>/d.

The following table provides an overview of the monthly flow totals for the Southwold Distribution System. Appendix A contains monthly flow readings from various meters throughout the distribution system to obtain the total flow and average daily flows for the Southwold Distribution System.

<b>MONTH</b>	<b>TOTAL (m<sup>3</sup>)</b>	<b>Average Daily Flow (m<sup>3</sup>/d)</b>
<b>January</b>	33,923	1,094
<b>February</b>	37,272	1,202
<b>March</b>	47,030	1,517
<b>April</b>	45,425	1,465
<b>May</b>	55,536	1,791
<b>June</b>	59,404	1,916
<b>July</b>	49,839	1,608
<b>August</b>	62,992	2,032
<b>September</b>	53,176	1,715
<b>October</b>	47,609	1,536
<b>November</b>	55,093	1,777
<b>December</b>	47,091	1,519
<b>Average Daily</b>	-	<b>1,598</b>
<b>Annual Total</b>	<b>594,390</b>	-

The flow is measured at the Shedden Re-Chlorination Facility for the purpose of re-chlorination. Below is a summary of flow through this facility.

<b>Month</b>	<b>Total Monthly Flow (m<sup>3</sup>)</b>	<b>Average Daily Flow (m<sup>3</sup>/d)</b>	<b>Maximum Daily Flow (m<sup>3</sup>/d)</b>
<b>January</b>	25,972.40	837.82	905.00
<b>February</b>	23,175.00	827.68	912.00
<b>March</b>	26,401.00	851.65	1,120.00
<b>April</b>	26,826.00	894.20	1,169.00
<b>May</b>	27,317.99	881.23	1,166.00
<b>June</b>	26,458.50	881.95	1,023.00
<b>July</b>	25,676.50	828.27	1,012.00
<b>August</b>	26,470.00	853.87	1,071.00
<b>September</b>	36,822.80	1,227.43	1,909.50
<b>October</b>	29,017.00	936.03	1,372.50
<b>November</b>	25,466.00	848.87	993.00
<b>December</b>	26,351.30	850.04	1,050.00
<b>Annual Total</b>	<b>325,954.49</b>	-	-
<b>Average Daily</b>	-	<b>893.3</b>	-
<b>Maximum Day Flow</b>	-	-	<b>1,909.5</b>

## Appendix A

Summary of flow volumes in the Southwold Distribution System (values in m<sup>3</sup> unless indicated).

Month	Talbot & Ford (Southwold Interconnect Chamber)	Talbot & Ford (Talbotville Chamber)	Wonderland & Clinton (Clinton Line Interconnect Chamber)	Other	Talbot & Iona (Iona Chamber)	Fingal Line (St. Thomas Chamber)	TOTAL	Average Daily Flow (m <sup>3</sup> /d)
<b>January</b>	37,549	5,100	7,912	2,869	-18,607	-900	33,923	1,094
<b>February</b>	39,674	4,595	7,192	2,721	-16,807	-103	37,272	1,202
<b>March</b>	47,891	5,600	8,708	3,517	-18,607	-79	47,030	1,517
<b>April</b>	46,502	5,445	8,850	3,086	-18,371	-87	45,425	1,465
<b>May</b>	54,794	6,425	9,543	3,523	-18,607	-142	55,536	1,791
<b>June</b>	58,015	6,710	9,245	3,580	-18,007	-139	59,404	1,916
<b>July</b>	50,026	5,850	9,530	3,144	-18,607	-104	49,839	1,608
<b>August</b>	58,113	6,740	13,329	3,523	-18,607	-106	62,992	2,032
<b>September</b>	61,612	7,165	14,113	3,098	-32,718	-94	53,176	1,715
<b>October</b>	50,368	5,890	10,341	2,920	-21,833	-77	47,609	1,536
<b>November</b>	56,155	6,560	7,590	2,705	-18,007	90	55,093	1,777
<b>December</b>	50,126	5,860	7,077	2,727	-18,608	-91	47,091	1,519
<b>Annual Total</b>	610,825	71,940	113,430	37,413	-237,386	-1832	594,390	1,598