



# 2024 SCHEDULE 22 SUMMARY REPORT

HILLSDALE  
DRINKING WATER  
SYSTEM

For the period of  
January 1<sup>st</sup>, 2024 to December 31<sup>st</sup>, 2024

Prepared for the Corporation of the Township of Springwater by the Ontario Clean Water Agency



This report was prepared in accordance with the requirements of [O.Reg 170/03, Schedule 22, Summary Reports for Municipalities](#) for the following system and reporting period:

<b>Drinking-Water System Number:</b>	220003911
<b>Drinking-Water System Name:</b>	Hillsdale Drinking Water System
<b>Drinking-Water System Owner:</b>	The Corporation of the Township of Springwater
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1, 2024 – December 31, 2024

## 1. Issue(s) of Non-Compliance

A Ministry of Environment, Conservation and Parks (MECP) Drinking Water System Inspection was conducted on October 25, 2024 for the period covering November 9, 2023 to October 25, 2024. On December 13, 2024 the Inspection Report was issued and an Inspection Summary Rating Record (IRR) of 100% was received.

The following is a summary of non-compliances noted in the MECP Inspection Report, as well as the duration and the measures that were taken to correct the non-compliance. If any self-reported non-compliances were included in the inspection report, they will be noted in Table 1.

**Table 1. Non-Compliances and Corrective Actions noted in the 2023/2024 MECP Inspection Report**

Non-Compliance(s)	Duration	Required Actions & Corrective Actions
N/A	N/A	N/A

The following table (Table 2) is a summary of any incidents that the Operating Authority interpreted as instances where any requirements of the Act, the regulations, the system’s approval, drinking water works permit (DWWP), municipal drinking water licence (MDWL), and any orders applicable were not met. The Operating Authority reported the following incidents to the MECP and confirmation of whether the incidents are considered non-compliances are noted in the MECP Inspection Report and included in Table 1.

**Table 2. Self-Reported Incidents and Corrective Actions for the Reporting Period**

Incident	Duration	Corrective Actions
<ul style="list-style-type: none"> <li>February 28, 2024: Loss of monitoring data - occurrence incident with O.Reg 170/03, Schedule 6.</li> <li>Loss of data at the Hillsdale pumphouse due to a power outage event</li> <li>There is no back-up generator at this site- extended outages will eventually cause a loss of data once the UPS battery runs out</li> </ul>	2024/02/28 from 1259 hrs to 1418 hrs	<ul style="list-style-type: none"> <li>OCWA responded to an alarm at the pumphouse and confirmed that the wells were locked out and there was no power to the facility.</li> <li>OCWA took distribution Cl2 residuals which were within compliance- 1.04 mg/L at Mill St. E sample station</li> <li>The Hillsdale water tower fed the distribution system during the outage</li> <li>System communication was re-established and operational.</li> </ul>

		<ul style="list-style-type: none"> <li>• The MECP deemed this as an occurrence incident and not a non-compliance</li> <li>• Verbal notification was provided to MECP on February 28, 2024. Written notification provided to MECP on February 29, 2024.</li> </ul>
<ul style="list-style-type: none"> <li>• February 28, 2024 – March 11, 2024: Well pump failure</li> <li>• Pumps for Wells 2 and 3 were no longer working and needed to be replaced, possibly due to a power bump and outage that occurred earlier in the day.</li> </ul>	<p>February 28 – March 11, 2024</p>	<ul style="list-style-type: none"> <li>• OCWA staff responded to call in alarm as well pumps tripped out. The pumps were reset multiple times but faulted.</li> <li>• OCWA UPIT responded and determined that well pumps weren't running because there was still a phase out in the hydro system. Hydro fixed the power issue on February 29, 2024.</li> <li>• OCWA UPIT returned to fix the pumps and determined that they were burned out and could no longer run.</li> <li>• OCWA UPIT mobilized OCWA OERT portable water plant and it was officially set up on March 1, 2024. Water was provided by City of Barrie and Township of Springwater – Elmvale to feed the water system. The fire department and Township were notified of the situation on February 29, 2024.</li> <li>• The Township of Springwater issued a water restriction notice to residents on March 1, 2024.</li> <li>• MECP and MOH were provided verbal and written notices on March 1, 2024.</li> <li>• OCWA staff took distribution residuals periodically and the continuous online chlorine analyzers functioned as intended.</li> <li>• Well 3 motor was replaced, well was chlorinated as per AWWA standards and sampled before it was placed back online on March 2, 2024.</li> <li>• Well 2 remained offline while a replacement pump was sourced. Well 2 motor was then replaced, well was chlorinated as per AWWA standards and sampled before it was placed back online on March 11, 2024.</li> <li>• MECP and MOH were provided written notices throughout the event and on</li> </ul>

		March 11, 2024 when the issue was fully resolved.
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For information on any Adverse Water Quality Incident(s) that may have occurred during the reporting period, please refer to the Hillsdale Drinking Water System Annual Report (Section 11).

## 2. Assessment of Flowrates and Quantity of Water Supplied

The following tables (Table 3 to 10) summarize the quantities and flowrates of water supplied during the reporting period, including monthly averages and maximum daily flows as well as a comparison to the rated capacity and flowrates approved in the system’s approval, DWWP or MDWL.

As required by the MDWL, regulatory flow measuring devices are checked/verified and where necessary calibrated. These checks/verifications/calibrations are performed annually by a third party to ensure the flow measuring devices are within acceptable deviation limits.

### 2.1 Treated Water

<b>Municipal Drinking Water License (MDWL):</b>	128-104 (Issue Number: 3)
<b>Allowable Rated Capacity:</b>	1,434 m <sup>3</sup> /day
<b>Allowable Flowrate into Treatment System:</b>	Not listed in MDWL

As per the MDWL, the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed the listed rated capacity. However, the MDWL allows a system to be operated temporarily at a maximum daily volume and/or a maximum flowrate above the values set out in the MDWL for the purposes of fighting a large fire or for the maintenance of the drinking water system.

**Table 3. Treated Water Annual and Monthly Average and Maximum Flows with Comparison to Rated Capacity and Total Volume for 2024**

Treated Water Flow					
Timeframe	Average Flow (m <sup>3</sup> /day)	Percent of Rated Capacity	Maximum Flow (m <sup>3</sup> /day)	Percent of Rated Capacity	Total Volume (m <sup>3</sup> )
January	228.58	15.94%	376.00	26.23%	7086.00
February	197.01	13.74%	284.00	19.81%	5620.09
March	220.29	15.36%	497.00	34.66%	6205.00
April	224.10	15.63%	600.00	41.85%	6499.00
May	219.13	15.28%	349.00	24.34%	6793.00
June	240.17	16.75%	341.00	23.78%	7205.00
July	232.52	16.22%	304.00	21.20%	7208.00
August	231.32	16.13%	341.00	23.78%	7171.00
September	262.21	18.29%	607.00	42.34%	7604.00

<b>Treated Water Flow</b>					
<b>Timeframe</b>	<b>Average Flow (m<sup>3</sup>/day)</b>	<b>Percent of Rated Capacity</b>	<b>Maximum Flow (m<sup>3</sup>/day)</b>	<b>Percent of Rated Capacity</b>	<b>Total Volume (m<sup>3</sup>)</b>
October	199.61	13.92%	337.00	23.50%	6188.00
November	197.13	13.75%	352.00	24.55%	5914.00
December	204.03	14.23%	365.00	25.46%	6325.00
<b>2024</b>	<b>221.34</b>	<b>15.44%</b>	<b>607.00</b>	<b>42.34%</b>	<b>79818.09</b>

*Note: Treated water flow data is based off of the combined raw water flow data. There is only one set of pumps (one per well) responsible for the raw water taking, water that flows into the treatment system and water the flows from the treatment system into the distribution system.*

A review of flow information for the reporting period indicates that the drinking water system operated within the rated capacity specified in the MDWL (1,434 m<sup>3</sup>/day), for the maximum treated volume of treated water that flows from the treatment subsystem to the distribution system.

A summary of flowrates of water that flows into the treatment system can be found in Table 5, Table 7 and Table 9. The applicable MDWL for the reporting period did not list a maximum allowable limit for the flowrate of water that flows into a treatment subsystem.

## 2.2 Raw Water

<b>Permit to Take Water Number (PTTW):</b>	1855-9JQQBZ 6454-D4MJSC
<b>Allowable Maximum Raw Water Volume - Well #1:</b>	284.60 m <sup>3</sup> /day
<b>Allowable Maximum Raw Water Flowrate - Well #1:</b>	654 L/min (10.90 L/sec)
<b>Allowable Maximum Volume of Raw Water - Well #2:</b>	492.50 m <sup>3</sup> /day
<b>Allowable Maximum Raw Water Flowrate – Well #2:</b>	342 L/min (5.70 L/sec)
<b>Allowable Maximum Raw Water Volume - Well #3:</b>	656.64 m <sup>3</sup> /day
<b>Allowable Maximum Raw Water Flowrate - Well #3:</b>	456 L/min (7.60 L/s)
<b>Allowable Maximum Daily Taking of Water from Any Combination of Wells:</b>	1,433.74 m <sup>3</sup> /day

During the reporting period Hillsdale Drinking Water System operated under two separate PTTWs:

- From January 1 to June 19, 2024: Hillsdale DWS operated under PTTW #1855-9JQQBZ which was set to expire on May 9, 2024. Under the approval of the MECP, PTTW #1855-9JQQBZ was to remain in effect until a determination on the PTTW renewal could be made.
- From June 19, 2024 to the end of the reporting period: Hillsdale DWS operated under PTTW #6454-D4MJSC as the new PTTW was issued. Upon issuance, PTTW #6454-D4MJSC was backdated to May 9, 2024. There were no changes to the raw water allowable

maximum volume takings or flowrates. There was no change in the allowable maximum combined raw water volume from all wells.

As per both PTTWs, water shall only be taken from the specified source(s) and at the rates and amounts taken as specified in the permit. Notwithstanding, the above maximum daily takings, the maximum daily taking of water from all wells identified is limited to 1,433.74 m<sup>3</sup>/day. See table 10 for a review of the combined maximum daily takings of water from all wells identified within the Hillsdale Drinking Water System.

**Table 4. Raw Water (Well #1) Monthly Average, Maximum Flow and Total Volume for 2024<sup>4A</sup>**

Raw Water Flow – Well #1 <sup>4A</sup>					
Timeframe	Average Flow (m <sup>3</sup> /day)	Percent of Allowable Volume	Maximum Flow (m <sup>3</sup> /day)	Percent of Allowable Volume	Total Volume (m <sup>3</sup> )
January	--	--	--	--	--
February	--	--	--	--	--
March	--	--	--	--	--
April	--	--	--	--	--
May	--	--	--	--	--
June	--	--	--	--	--
July	--	--	--	--	--
August	--	--	--	--	--
September	--	--	--	--	--
October	--	--	--	--	--
November	--	--	--	--	--
December	--	--	--	--	--
<b>2024</b>	--	--	--	--	--

<sup>4A</sup>Well #1 was offline during the reporting period. No raw water has produced or sent to the treatment and distribution system during this timeframe.

**Table 5. Raw Water (Well #1) Annual and Monthly Maximum Flowrates for 2024<sup>5A</sup>**

Raw Water Flowrate – Well #1 <sup>5A</sup>	
Timeframe	Maximum Flowrate (L/sec)
January	-
February	-
March	-
April	-
May	-
June	-
July	-
August	-

<b>Raw Water Flowrate – Well #1<sup>5A</sup></b>	
<b>Timeframe</b>	<b>Maximum Flowrate (L/sec)</b>
September	-
October	-
November	-
December	-
<b>2024</b>	-

<sup>5A</sup>Well #1 was offline during the reporting period. No raw water has produced or sent to the treatment and distribution system during this timeframe.

**Table 6. Raw Water (Well #2) Monthly Average, Maximum Flow and Total Volume for 2024**

<b>Raw Water Flow – Well #2</b>					
<b>Timeframe</b>	<b>Average Flow (m<sup>3</sup>/day)</b>	<b>Percent of Allowable Volume</b>	<b>Maximum Flow (m<sup>3</sup>/day)</b>	<b>Percent of Allowable Volume</b>	<b>Total Volume (m<sup>3</sup>)</b>
January	104.68	21.25%	175.00	35.53%	3245.00
February	93.11	18.91%	132.00	26.80%	2607.00
March	78.00	15.84%	132.00	26.80%	1794.00
April	99.62	20.23%	267.00	54.21%	2889.00
May	97.61	19.82%	156.00	31.68%	3026.00
June	107.17	21.76%	152.00	30.86%	3215.00
July	100.90	20.49%	134.00	27.21%	3128.00
August	102.23	20.76%	152.00	30.86%	3169.00
September	115.76	23.50%	269.00	54.62%	3357.00
October	88.00	17.87%	150.00	30.46%	2728.00
November	86.10	17.48%	155.00	31.47%	2583.00
December	88.03	17.87%	157.00	31.88%	2729.00
<b>2024</b>	<b>96.77</b>	<b>19.65%</b>	<b>269.00</b>	<b>54.62%</b>	<b>34470.00</b>

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume for Well #2 (492.50 m<sup>3</sup>/day).

**Table 7. Raw Water (Well #2) Annual and Monthly Maximum Flowrates for 2024**

<b>Raw Water Flowrate – Well #2</b>	
<b>Timeframe</b>	<b>Maximum Flowrate (L/sec)</b>
January	5.84 <sup>7A</sup>
February	6.06 <sup>7B</sup>
March	6.42 <sup>7C</sup>
April	6.59 <sup>7D</sup>
May	5.24

<b>Raw Water Flowrate – Well #2</b>	
<b>Timeframe</b>	<b>Maximum Flowrate (L/sec)</b>
June	5.22
July	5.47
August	5.90 <sup>7E</sup>
September	5.59
October	6.23 <sup>7F</sup>
November	5.61
December	6.26 <sup>7G</sup>
<b>2024</b>	<b>6.59<sup>7D</sup></b>

A review of flow information for the reporting period indicates that the system operated within the PTTW's the maximum allowable raw water flowrate for Well #2 (5.70 L/sec) with the exception of:

- <sup>7A</sup>January 28, 2024 – Flowrate exceedances were of very short duration and were a result of well pump start-up
- <sup>7B</sup>February 1, 2024 – Flowrate exceedances were of very short duration and were a result of well pump start-up
- <sup>7C</sup>March 11, 2024 – Flowrate exceedances were of very short duration and were a result of running well to waste for work orders
- <sup>7D</sup>April 14, 2024 – Flowrate exceedances were of very short duration and were a result of well pump start-up
- <sup>7E</sup>August 24, 2024 – Flowrate exceedances were of very short duration and were a result of well pump start-up
- <sup>7F</sup>October 11, 2024 – Flowrate exceedances were of very short duration and were a result of well pump start-up
- <sup>7G</sup>December 17, 2024 – Flowrate exceedances were of very short duration and were a result of well pump start-up

**Table 8. Raw Water (Well #3) Monthly Average, Maximum Flow and Total Volume for 2024**

<b>Raw Water Flow – Well #3</b>					
<b>Timeframe</b>	<b>Average Flow (m<sup>3</sup>/day)</b>	<b>Percent of Allowable Volume</b>	<b>Maximum Flow (m<sup>3</sup>/day)</b>	<b>Percent of Allowable Volume</b>	<b>Total Volume (m<sup>3</sup>)</b>
January	123.90	18.87%	201.00	30.61%	3841.00
February	103.90	15.82%	152.00	23.15%	3013.09
March	142.29	21.67%	365.00	55.59%	4411.00
April	124.48	18.96%	333.00	50.71%	3610.00
May	121.52	18.51%	193.00	29.39%	3767.00
June	133.00	20.25%	189.00	28.78%	3990.00
July	131.61	20.04%	170.00	25.89%	4080.00

Raw Water Flow – Well #3					
Timeframe	Average Flow (m <sup>3</sup> /day)	Percent of Allowable Volume	Maximum Flow (m <sup>3</sup> /day)	Percent of Allowable Volume	Total Volume (m <sup>3</sup> )
August	129.10	19.66%	189.00	28.78%	4002.00
September	146.45	22.30%	338.00	51.47%	4247.00
October	111.61	17.00%	187.00	28.48%	3460.00
November	111.03	16.91%	197.00	30.00%	3331.00
December	116.00	17.67%	208.00	31.68%	3596.00
<b>2024</b>	<b>124.57</b>	<b>18.97%</b>	<b>365.00</b>	<b>55.59%</b>	<b>45348.09</b>

A review of flow information for the reporting period indicates that the system operated within the PTTW’s maximum allowable daily raw water volume for Well #3 (656.64 m<sup>3</sup>/day).

**Table 9. Raw Water (Well #3) Annual and Monthly Maximum Flowrates for 2024**

Raw Water Flowrate – Well #3	
Timeframe	Maximum Flowrate (L/sec)
January	7.63 <sup>9A</sup>
February	6.92
March	8.95 <sup>9B</sup>
April	7.60
May	7.55
June	7.47
July	7.78 <sup>9C</sup>
August	7.66 <sup>9D</sup>
September	7.40
October	7.23
November	7.36
December	7.40
<b>2024</b>	<b>8.95<sup>9B</sup></b>

A review of flow information for the reporting period indicates that the system operated within the PTTW’s the maximum allowable raw water flowrate for Well #3 (7.60 L/s) with the exception of:

- <sup>9A</sup>January 1, 2024 – Flowrate exceedances were of very short duration and were a result of well pump start-up.
- <sup>9B</sup>March 2, 2024 – Flowrate exceedances were of very short duration and were a result of well pump start-up.
- <sup>9C</sup>July 12, 2024 – Flowrate exceedances were of very short duration and were a result of the dialer being upgraded.
- <sup>9D</sup>August 2, 2024 – Flowrate exceedances were of very short duration and were a result of well pump start-up.

**Table 10. Combined Well (Well #1, Well #2 & Well #3) Annual and Monthly Flow and Total Volume for 2024**

<b>Combined Well Flow (Well #1, Well #2 &amp; Well #3)</b>					
<b>Timeframe</b>	<b>Average Flow (m<sup>3</sup>/day)</b>	<b>Percent of Allowable Volume</b>	<b>Maximum Flow (m<sup>3</sup>/day)</b>	<b>Percent of Allowable Volume</b>	<b>Total Volume (m<sup>3</sup>)</b>
January	228.58	15.94%	376.00	26.23%	7086.00
February	197.01	13.74%	284.00	19.81%	5620.09
March	220.29	15.36%	497.00	34.66%	6205.00
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June	240.17	16.75%	341.00	23.78%	7205.00
July	232.52	16.22%	304.00	21.20%	7208.00
August	231.32	16.13%	341.00	23.78%	7171.00
September	262.21	18.29%	607.00	42.34%	7604.00
October	199.61	13.92%	337.00	23.50%	6188.00
November	197.13	13.75%	352.00	24.55%	5914.00
December	204.03	14.23%	365.00	25.46%	6325.00
<b>2024</b>	<b>221.34</b>	<b>15.44%</b>	<b>607.00</b>	<b>42.34%</b>	<b>79818.09</b>

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily taking of water from any combination of wells (1,433.74 m<sup>3</sup>/day).