



COCHRANE WELL
SUPPLY

2025 ANNUAL
REPORT

WATERWORKS # 22 000 3047

As per Section 11 and schedule 22 of O. Reg. 170/03

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2025 Annual Report

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ANNUAL REPORT



OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	22 000 3047
Drinking-Water System Name:	Cochrane Well Supply
Drinking-Water System Owner:	The Corporation of the Town of Cochrane
Drinking-Water System Category:	Large Municipal Residential System
Period being reported:	January 1, 2025 to December 31, 2025

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [] No [x]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [x] No []</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Infrastructure Services 92 Second Street Cochrane Ontario P0L 1C0</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input style="width: 50px;" type="text" value="4"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [x] No []</p> <p>Number of Interested Authorities you report to: <input style="width: 50px;" type="text" value="0"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [x] No []</p>
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Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?
Yes [] No []

Indicate how you notified system users that your annual report is available, and is free of charge.



- Public access/notice via the web
- Public access/notice via Government Office
- Public access/notice via a newspaper
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method message on Water/Wastewater bill

Describe your Drinking-Water System

The water treatment works relies on groundwater from 3 wells, each with a capacity of 45.3 litres per second. The maximum flow for each well cannot exceed 50 liters per second. The wells are located at the east side of Water Plant Road, Lot 19, Concession 1, in the Town of Cochrane, next to the Plant. While the population of Cochrane is about 5,500, the Plant has the capacity of delivering 8,000 cubic meters per day.

The treatment process was designed to remove high iron content, manganese and hardness present in the raw water supplied that is produced by the three wells. "Lime Softening" is the process that is used. First, hydrated lime (calcium hydroxide) is added to the water. This increases the pH of the water causing the calcium carbonate, iron and manganese to precipitate out of the water. Most of the precipitated particles settle out in the two clarifiers. Then carbon dioxide is added in re-carbonation tanks to reduce the pH to normal levels with the dual media filters used to filter out any remaining particles. The finished water is now stored in an interconnected twin-celled in-ground clear well/reservoir that has a capacity of 2,300 cubic meters. Three high-lift pumps, each rated at 83.4 liters per second are used to pump the water into the Town's distribution system. On the other side of town, a 2,700 cubic meters elevated storage tank provides gravity flow to the town. This storage is used during peak demand times in the day and is available to provide the very high flow rates that could be required by the fire department in case of a large fire. The plant and storage tank (tower) have automatic control and alarm systems that notify the operator of any problems. The plant also has an emergency diesel generator that allows water to be treated and pumped in the event of a power outage. Cochrane Water & Wastewater Services employs the services of Testmark Laboratories for all testing of water samples. All laboratories employed for Town of Cochrane water testing are accredited:

Testmark Laboratories
1335 Riverside Drive
Timmins Ontario
P4R 1A6
(705) 531-1121

List all water treatment chemicals used over this reporting period

- Chlorine Gas – Disinfection**
- Sodium Bicarbonate – Flocculation/ Coagulation**
- Hydrated Lime – Softening process**
- Sodium Silicate – Flocculation / Coagulation**
- Carbon Dioxide – pH Adjustment**

Were any significant expenses incurred to?

- Install required equipment



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- Repair required equipment
- Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

Replaced Lime Feed Pump
 Replaced lime feeding system
 Repairs waterlines inside plant
 Repairs to chlorine system – Change Chlorine Cylinder Heads on Post.
 Replaced Chlorine Analyzer

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	153	0-0	0-0	0	
Treated	52	0-0	0-0	52	0-0
Distribution	260	0-0	0-0	260	0-0

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (min #)-(max #)	Unit of Measure
Turbidity	8760	0.0-3.78	NTU
Chlorine	8760	0.33-2.47	Mg/L
Fluoride (If the DWS provides fluoridation)			

NOTE: For continuous monitors use 8760 as the number of samples.

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure



Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	October 1, 2024	< 0.5	ug/L	No
Arsenic	October 1, 2024	< 1	ug/L	No
Barium	October 1, 2024	11	ug/L	No
Boron	October 1, 2024	18	ug/L	No
Cadmium	October 1, 2024	< 0.1	ug/L	No
Chromium	October 1, 2024	2	ug/L	No
*Lead	2025	0.90	ug/L	No
Mercury	October 1, 2024	< 0.1	ug/L	No
Selenium	October 1, 2024	< 0.2	ug/L	No
Sodium	2024	21666	ug/L	Yes
Uranium	October 1, 2024	<1	ug/L	No
Fluoride	May 7, 2024	0.09	mg/L	No
Nitrite	Nov 4, 2025	< 0.05	mg/L	No
Nitrate	Nov 4, 2025	< 0.05	mg/L	No

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Number of Exceedances
Plumbing	Exempt			
Distribution	Exempt	0.1-1.0	Ug/L	None

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	October 1, 2024	<0.238	Ug/L	No
Atrazine + N-dealkylated metabolites	October 1, 2024	<0.238	Ug/L	No
Azinphos-methyl	October 1, 2024	<0.179	Ug/L	No
Benzene	October 1, 2024	<0.1	Ug/L	No
Benzo(a)pyrene	October 1, 2024	<0.01	Ug/L	No



Bromoxynil	October 1, 2024	<0.0982	Ug/L	No
Carbaryl	October 1, 2024	<2	Ug/L	No
Carbofuran	October 1, 2024	<3	Ug/L	No
Carbon Tetrachloride	October 1, 2024	<0.2	Ug/L	No
Chlorpyrifos	October 1, 2024	<0.179	Ug/L	No
Diazinon	October 1, 2024	<0.179	Ug/L	No
Dicamba	October 1, 2024	<0.0859	Ug/L	No
1,2-Dichlorobenzene	October 1, 2024	<0.2	Ug/L	No
1,4-Dichlorobenzene	October 1, 2024	<0.3	Ug/L	No
1,2-Dichloroethane	October 1, 2024	<0.2	Ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	October 1, 2024	<0.3	Ug/L	No
Dichloromethane	October 1, 2024	<1	Ug/L	No
2-4 Dichlorophenol	October 1, 2024	<0.2	Ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	October 1, 2024	<0.368	Ug/L	No
Diclofop-methyl	October 1, 2024	<0.123	Ug/L	No
Dimethoate	October 1, 2024	<0.179	Ug/L	No
Diquat	October 1, 2024	<0.2	Ug/L	No
Diuron	October 1, 2024	<10	Ug/L	No
Glyphosate	October 1, 2024	<20	Ug/L	No
Malathion	October 1, 2024	<0.179	Ug/L	No
Metolachlor	October 1, 2024	<0.119	Ug/L	No
Metribuzin	October 1, 2024	<0.119	Ug/L	No
Paraquat	October 1, 2024	<0.2	Ug/L	No
Pentachlorophenol	October 1, 2024	<0.3	Ug/L	No



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Phorate	October 1, 2024	<0.119	Ug/L	No
Picloram	October 1, 2024	<0.0859	Ug/L	No
Prometryne	October 1, 2024	<0.0596	Ug/L	No
Simazine	October 1, 2024	<0.179	Ug/L	No
THM (NOTE: show latest annual average)	2025	48.5	Ug/L	No
Terbufos	October 1, 2024	<0.119	Ug/L	No
Tetrachloroethylene	October 1, 2024	<0.3	Ug/L	No
2,3,4,6-Tetrachlorophenol	October 1, 2024	<0.3	Ug/L	No
Triallate	October 1, 2024	<0.119	Ug/L	No
Trichloroethylene	October 1, 2024	<0.2	Ug/L	No
2,4,6-Trichlorophenol	October 1, 2024	<0.2	Ug/L	No
Trifluralin	October 1, 2024	<0.119	Ug/L	No
Vinyl Chloride	October 1, 2024	<0.1	Ug/L	No

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample

COMPLIANCE

COMPLIANCE

To the best of our knowledge, the Cochrane Water Treatment Plant is in compliance with all regulatory requirements as outlined in the Drinking Water Works Permit, Municipal Drinking Water License, Permit to Take Water and Ontario Regulation 170/03.

In 2025, the Cochrane Water Treatment Plant did not undergo a Ministry of Environment, Conservation and Parks annual inspections.

SUMMARY OF FLOWS

Summary of Flows

This report is prepared to comply with Schedule 22 section 3(1) of Reg 170/03 of the SDWA

- (3) 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.

TREATED WATER

Month	Daily Average In m ³	Maximum Daily Flow in L/s
January	1,337	71.9
February	1,484	75.6
March	1,261	79
April	1,377	73.5
May	1,867	79.6
June	1,293	77.1
July	1,353	78.5
August	1,369	77.6
September	1,272	77.1
October	1,365	73.9
November	1,381	73.4
December	1,203	72.7
Total Average	1,380	75.8

RAW WATER

Month	Daily Average In m ³	Maximum Daily Flow in L/s
January	1,587	91.4
February	2,060	96.8
March	1,384	99.0
April	1,538	92.3
May	2,031	96.3
June	1,470	97.1
July	1,516	96.8
August	1,546	94.0
September	1,444	92.2
October	1,541	105.7
November	1,592	92.0
December	1,268	92.5
Total Average	1,581	95.5

COMPARISON OF FLOWS

Comparison of the Summary of Flows

- (3) 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.

2025 Total Flow

Month	Raw Water Total Monthly Flow In m ³	Treated Water Total Monthly Flow In m ³
January	49,208.7	41,448.1
February	57,668.7	41,538.5
March	42,913.2	39,082.8
April	46,155.7	41,295.5
May	62,968.1	57,872.5
June	44,087.6	38,793.4
July	46,987.4	41,928.4
August	47,915.8	42,429.5
September	43,308.8	38,170.7
October	47,782.1	42,314.7
November	47,768.1	41,436.9
December	39,294.1	37,301.6
Total	576,058.3	503,612.6

Item	2025	2024	2023	2022
Avg. Raw Water Day Flow m ³ /day	1,581	1,567	1,510	1,395
Design Capacity m ³ /day	7,856.60	7,856.60	7,856.60	7,856.60
% (Avg. day/design capacity)	20.12%	19.95%	19.22%	17.75%

Comparison of the Summary of Flows continued

The Total Flow (raw water) in 2025 was 576,058 m³, which represents 20.08 % of the total capacity for the year. The average daily flow in 2025 was 1,581m³ which is only 20.12 % of design. The approved plant treatment capacity of 7,856m³/day was not exceeded during this period. The daily peak flow of 6,000L/s was not exceeded. The operating level of the plant is set at approximately 65 L/s with two of our 3 wells operating at a time.

The aquifer continues to perform within expectations and there is no concern at this time on the continued performance. Each of the wells #5,6 and 7 are drilled to a depth of 45 to 50 meters and equipped with a submersible well water pump with a rated capacity of 45.3 L/s at a TDH of 32.3 meters, pitless adapter, sanitary well seal, air line and supply line to the water treatment plant. The wells were last inspected by International Water Supply in 2022, recommendations to reline Well # 5 was completed in 2023. The Elevated Tank was inspected on August 1st, 2024.

Based on available records the draw downs of each well are measured monthly and documented. Draw downs were reported as being for Well # 5 – 6 to 8 meters, Well # 6 - 1 to 3 meters and Well # 7 - 2 to 3 meters.