3/31/2025

City of Greater Sudbury Annual Water Summary Report

Covering January 1, 2025– December 31, 2025

O. Reg 170/03 Schedule 22 Annual Water Summary Report
Prepared by The City of Greater Sudbury

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Introduction

The production and delivery of drinking water in Ontario is regulated by Ontario Regulation (O. Reg.) 170/03 governed by the Ministry of the Environment, Conservation and Parks (MECP) under the Safe Drinking Water Act (SDWA), 2002, S.O. 2002, c. 32.

The purpose of this summary report is to provide system owners and municipal Council information to satisfy the regulatory reporting required under Schedule 22 titled Summary Reports for Municipalities of the O. Reg. 170/03 Drinking Water Systems.

The information within the report must cover the following topics of the previous calendar year from January 1st through to December 31st:

- A list of orders that were not met, the duration and any corrective actions needed.
- A brief description of the operations of the treatment systems.
- Quantities and flow rates of the water supplied during the reporting period, including monthly averages and maximum daily flows.
- A comparison of the quantities and flows to the rated capacities approved in the system performance section in the Municipal Drinking Water License (MDWL).

An Annual Water Quality Report, to fulfill Section 11 of Ontario Regulation 170/03, has been completed separately. It details the drinking water quality of all the CGS-owned and operated drinking water systems and is available for viewing on the City of Greater Sudbury's website.

Summary

During the 2025 calendar year, the City of Greater Sudbury (CGS) operated its Drinking Water Systems (DWS) within the limits specified in all applicable Municipal Drinking Water Licences (MDWL). Surface water plants supplying the Sudbury DWS operated at less than half of permitted levels, with the Wanapitei Water Treatment Plant (WTP) averaging 48% and the David Street WTP utilizing 38% of their Permits to Take Water (PTTW) permissible total water takings. Ground water systems also operated below permitted levels with Blezard Valley-Capreol DWS at 39% (Valley) and 1% (Capreol), Falconbridge DWS at 22%, Garson DWS at 17%, Onaping DWS at 38%, and Dowling DWS at 5% of its PTTW. Water takings are consistent with previous years.

As part of our ongoing commitment to providing safe, reliable drinking water while meeting the requirements of source water protection legislation, CGS continues to invest in water treatment and the distribution system to perform critical upgrades and renew aging infrastructure. These upgrades are not necessarily the result of any water quality problems but are completed to reduce the risk of drinking water contamination as part of our Statutory Standard of Care. The rule stipulates that water works owners will continually monitor waterworks performance, source water quality, and review levels of treatment versus current standards and emerging technologies. For example, this standard of care has been demonstrated through the following projects:

The construction of a filtration system for the removal of iron and manganese within the Blezard Valley-Capreol system is underway with its estimated completion date to be the summer of 2026.

The ongoing study and design to supply Garson East with an alternate source of water with the goal of decommissioning three aging groundwater wells with possible future water quality concerns.

Wanapitei WTP filter refurbishment, one unit per year over four years. One filter has been completed. Reactivator repairs and upgrades, and UV valve replacement.

David WTP membrane train replacement, one train per year over four years. One train has been completed.

Wanapitei WTP Intake low lift pumps valve optimization.

Wanapitei WTP high lift pumps valve optimization.

Well repair and pump assessments as well as various site assessments for future upgrades.

The MECP is responsible for the enforcement of rules and conducts inspections of all large municipal water systems. As for this report, all CGS water systems have passed inspection with one issue identified:

1. Ongoing presence of tetrachloroethylene within the Garson Wells #1 and #3.

Twenty-three adverse water quality incident (AWQI) reports were filed in 2025. Corrective actions were taken, and issues were promptly addressed, reported to the MECP and Public Health Sudbury & Districts (PHSD). They are discussed in further detail in each system specific section.

The Community Lead Testing Initiative was implemented in 2007 as part of O. Reg. 170/03, Schedule 15.1. The MECP granted CGS relief from residential lead testing in all systems except for the Sudbury DWS, fed by the Wanapitei and David St. WTPs. These water systems must continue to be sampled due to the population served by that system, not because of water quality concerns. CGS continues to provide corrosion control programs in most DWS as required to lower possible exposure to lead in older residential areas.

Water quality throughout all systems is monitored 24 hours a day, 365 days a year. Regular sampling schedules are followed in accordance with O. Reg. 170/03 and our Municipal Drinking Water Licenses and Permits. Treated water is fluoridated in all CGS systems under the direction of PHSD.

System Specific

Drinking Water Services within the CGS are a combination of municipally owned and operated utilities along with the supply of purchased potable water. CGS owns and operates two surface water treatment plants servicing the Sudbury distribution systems, six groundwater well fields along with their own distribution systems and one independent distribution system conveying purchased potable water from Vale's Vermilion Water Treatment Plant.

Table 1 - Overview of the City's Water Systems

Drinking Water System	Type of Facility	Source of Water	Communities Served
Sudbury DWS – Wanapitei	• Class IV Surface water conventional treatment plant • Class IV Distribution system	Wanapitei River	Sudbury, Coniston, Wahnapitae, Markstay, Garson West
Sudbury DWS – David St.	• Class III Surface water Membrane Filtration Plant • Class IV Distribution system	Ramsey Lake	Sudbury (West and South sections)
Sudbury DWS - Garson	• Class I Wells • Class II Distribution system	Groundwater	Garson East (east of Penman Dr.)
Dowling DWS	• Class I Wells • Class I Distribution system	Groundwater	Dowling
Valley DWS	• Class I Wells • Class II Distribution system	Groundwater	Valley East, Azilda, Chelmsford & Capreol
Falconbridge DWS	• Class I Wells • Class II Distribution system	Groundwater	Falconbridge
Onaping /Levack DWS	• Class I Wells • Class II Distribution system	Groundwater	Onaping & Levack
Vermilion Distribution System	• Class II Distribution System	Vermilion River WTP Owned and Operated by Vale	Lively, Naughton, Whitefish, Copper Cliff, Walden Industrial Park

Sudbury Drinking Water System 210001111 - Wanapitei

The Sudbury DWS is comprised of three different water sources: the Wanapitei Water Treatment Plant (WTP), the David St. WTP and the Garson Well Field.

The Wanapitei WTP is a conventional surface plant located between the towns of Coniston and Wahnapitae. Its source water is the Wanapitei River. The plant's rated capacity is 54,000 m^3/day and provides approximately sixty percent of the potable water in the Sudbury DWS. The treatment process follows these steps:

- Raw river water is screened through coarse and fine screens. Five pumps convey the raw water several kilometers to the plant for treatment;
- Raw water is initially disinfected by chlorination;
- A chemical to clump dirt (poly aluminum chloride) and chemical to help weigh down solids (polymer) is added to remove solids that are in suspension with separation performed by gravity sedimentation of clarified water and sludge;
- Settled sludge waste is pumped to a nearby sewage lagoon for treatment and the clarified water is sent to four filters;
- Filtered water flows into a basin where lime is added to adjust the final pH along with the addition of a corrosion control chemical;
- Chlorine is added to ensure final disinfection of potable water and to maintain a residual disinfectant within the distribution system; and
- Treated water is exposed to ultraviolet (UV) light disinfection to provide extra inactivation of pathogens and pumped east to the community of Markstay and west towards the communities of Coniston, Sudbury and to fill the Ellis Reservoir.

Non-Compliance with Act, Regulations, Order or Approvals

In 2025, the Wanapitei system one non-compliance to report:

During a review of operations, inconsistencies between documented sampling sites and the locations sampled were observed. The incident was communicated to MECP and corrective actions were conducted in accordance to CGS policies.

Annual Flow Summary

Wanapitei WTP

Wanapitei WTP							
	Total Flow m^3	**Average Daily Flow m^3/d**	**Maximum Daily Flow m^3/d**	**Instantaneous Peak Flow L/s**	**MDWL Daily Maximum Permitted m^3/d**	**MDWL Annual Permitted m^3**	**% Capacity**
January	758,559	24,470	26,944	422.4	54,000	19,710,000	45.3
February	652,282	23,296	25,501	386.4	54,000	19,710,000	43.1
March	707,292	22,816	24,845	446.0	54,000	19,710,000	42.3
April	735,536	24,518	25,818	402.8	54,000	19,710,000	45.4
May	804,900	25,965	28,875	438.5	54,000	19,710,000	48.1
June	793,992	26,466	28,945	436.7	54,000	19,710,000	49.0
July	831,929	26,836	30,054	387.6	54,000	19,710,000	49.7
August	901,116	29,068	31,526	473.9	54,000	19,710,000	53.8
September	827,183	27,573	30,402	448.5	54,000	19,710,000	51.1
October	800,837	25,833	28,150	423.5	54,000	19,710,000	47.8
November	754,389	25,146	27,181	420.9	54,000	19,710,000	46.6
December	797,884	25,738	28,399	419.6	54,000	19,710,000	47.7
Total	9,365,900				54,000	19,710,000	47.5

Sudbury Drinking Water System 220003537- David Street

David St. WTP is an ultra-filtration membrane surface water treatment plant. The plant's rated capacity is 40,000 m^3/day and provides approximately 40 percent of the drinking water to Sudbury DWS. The raw water intake is located approximately three hundred meters (300 m) from the shores of Ramsey Lake. The treatment process follows these steps:

- Raw lake water is screened through coarse screens and two strainers and is initially disinfected by adding chlorine;
- Four pumps send the water to membranes for ultrafiltering, where particles 0.02 microns (µm) in size or larger are removed;
- The filtered water flows into a reservoir where chlorine is added to ensure final cleaning of drinking water and to maintain a leftover disinfectant within the pipe system. Sodium hydroxide is added, as needed, for pH control. Fluoride is added to prevent tooth decay along with a corrosion inhibitor;
- The treated water is pumped through ultraviolet light cleaning units to provide extra inactivation of pathogens; and
- The treated water is pumped to the pipe system by four pumps and directs water flows to the south, west and downtown sections of the City of Greater Sudbury. Water from this plant is also used to fill the Ellis Reservoir.

Non-Compliance with Act, Regulations, Order or Approvals

In 2025, the David St. WTP system had four AWQI to report:

On three separate occasions distribution samples were analyzed and found to have the presence of total coliforms. The sites were resampled and analyzed, and no total coliforms were present. This could be due to sampling or laboratory error as the presence of chlorine was apparent. Employees were reinformed and conversations with the third-party lab were conducted to ensure quality assurance of sampling and lab results. During a review of operations, inconsistencies between documented sampling sites and the locations sampled were observed. The incident was communicated to MECP and corrective actions were conducted in accordance to CGS policies.

The sodium result for this system was above the maximum allowable concentration (MAC) limit in the Ontario Drinking Water Standards (ODWS).

Annual Flow Summary

David WTP

David St. WTP							
	Total Flow m^3	**Average Daily Flow m^3/d**	**Maximum Daily Flow m^3/d**	**Instantaneous Peak Flow L/s**	**MDWL Daily Maximum Permitted m^3/d**	**MDWL Annual Permitted m^3**	**% Capacity**
January	452,039	14,582	16,892	442.1	40,000	14,600,000	36.5
February	460,765	14,863	23,061	442.0	40,000	14,600,000	41.1
March	534,312	17,236	19,778	442.4	40,000	14,600,000	43.1
April	432,247	13,943	15,562	392.4	40,000	14,600,000	36.0
May	441,115	14,230	16,389	382.5	40,000	14,600,000	35.6
June	463,349	14,947	17,993	439.7	40,000	14,600,000	38.6
July	479,827	15,478	19,015	591.8	40,000	14,600,000	38.7
August	464,214	14,975	17,779	406.7	40,000	14,600,000	37.4
September	432,643	13,956	18,109	463.0	40,000	14,600,000	36.1
October	441,289	14,235	18,985	423.7	40,000	14,600,000	35.6
November	420,600	13,568	15,049	343.2	40,000	14,600,000	35.0
December	448,480	14,467	19,793	341.5	40,000	14,600,000	36.2
Total	5,470,880				40,000	14,600,000	37.5

Sudbury Drinking Water System 220003485 - Garson

Garson is a groundwater system consisting of three wells servicing the community of Garson east of Penman Ave and O'Neil Dr East. The three wells are:

- Garson Well No. 1;
- Garson Well No. 2; and
- Garson Well No. 3.

The system includes three well pumps, cleaning with sodium hypochlorite and fluoride (for dental health) injection. The pipe system extends from Skead Road to the north to Garson-Coniston Road to the south. The community west of Penman Avenue is serviced from the Sudbury pipe system and is connected to the rest of the Garson system by a pressure-actuated valve at Falconbridge Road and O'Neil Drive West. If all three wells were to fail, this valve would open supplying the eastern portion of the community with water from the Sudbury system.

In 2011, with direction and consultation from PHSD and the MECP, CGS committed to undertaking a groundwater monitoring program for tetrachloroethylene (TCE). In 2012, four (4) monitoring wells were drilled in the area. Sampling and analysis are completed. Although TCE levels found during audit sampling are below regulatory limits, CGS is proactively sampling and monitoring these levels. In 2017 CGS retained a consultant to provide options for the Garson system. Feeding the entire community of Garson from the Sudbury Drinking water system was selected as the best option. The upgrades required to facilitate this are currently in the detailed design phase. In the meantime, well #3 is being underutilized as it has the highest amount of TCE.

Non-Compliance with Act, Regulations, Order or Approvals

Garson DWS had one AWQIs reported in 2025 and two Water Advisories.

Two low water pressure in the system were reported during water main break and a "Do Not Drink Water" advisory was issued. The section of main in question was replaced during the summer of 2025.

The sodium result for this system was above the maximum allowable concentration (MAC) limit in the Ontario Drinking Water Standards (ODWS).

Annual Flow Summary

Garson Well #1

Garson Well #1							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	6,625	214	448	11.6	1,572	573,955	13.6
February	6,561	234	298	11.9	1,572	573,955	14.9
March	5,841	188	274	17.3	1,572	573,955	12.0
April	6,979	233	664	17.1	1,572	573,955	14.8
May	8,327	269	512	20.1	1,572	573,955	17.1
June	9,860	329	657	11.8	1,572	573,955	20.9
July	8,702	281	551	16.6	1,572	573,955	17.9
August	9,151	295	561	16.9	1,572	573,955	18.8
September	7,810	260	454	17.4	1,572	573,955	16.6
October	7,118	230	317	14.6	1,572	573,955	14.6
November	6,193	206	309	13.6	1,572	573,955	13.1
December	6,559	212	297	11.7	1,572	573,955	13.5
Total	89,726				1,572	573,955	15.6

Garson Well #2

Garson Well #2							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	11,327	365	1,485	40.0	2,981	1,088,065	12.3
February	2	0	2	40.0	2,981	1,088,065	0.0
March	548	18	327	40.0	2,981	1,088,065	0.6
April	31,532	1,051	1,861	40.0	2,981	1,088,065	35.3
May	27,711	894	1,168	40.0	2,981	1,088,065	30.0
June	27,583	919	1,088	25.7	2,981	1,088,065	30.8
July	27,722	894	1,072	27.8	2,981	1,088,065	30.0
August	27,449	885	1,078	38.5	2,981	1,088,065	29.7
September	28,013	934	1,237	40.0	2,981	1,088,065	31.3
October	26,041	898	1,157	40.0	2,981	1,088,065	28.2
November	24,874	829	908	28.4	2,981	1,088,065	27.8
December	25,619	826	1,010	25.7	2,981	1,088,065	27.7
Total	258,419				2,981	1,088,065	23.8

Garson Well #3

Garson Well #3							
	Total Flow m^3	**Average Daily Flow m^3/d**	**Maximum Daily Flow m^3/d**	**Instantaneous Peak Flow L/s**	**MDWL Daily Maximum Permitted m^3/d**	**MDWL Annual Permitted m^3**	**% Capacity**
January	25,772	831	1,398	30.4	3,275	1,195,214	25.4
February	30,108	1,075	1,654	31.6	3,275	1,195,214	32.8
March	39,079	1,261	1,746	32.6	3,275	1,195,214	38.5
April	8,050	268	1,125	31.1	3,275	1,195,214	8.2
May	4,873	157	653	39.5	3,275	1,195,214	4.8
June	2,654	88	259	24.6	3,275	1,195,214	2.7
July	2,736	88	384	29.3	3,275	1,195,214	2.7
August	2,888	93	497	30.9	3,275	1,195,214	2.8
September	4,612	154	733	35.3	3,275	1,195,214	4.7
October	4,662	150	905	25.1	3,275	1,195,214	4.6
November	1,727	58	310	24.1	3,275	1,195,214	1.8
December	2,224	72	752	24.4	3,275	1,195,214	2.2
Total	129,386				3,275	1,195,214	10.8

Dowling Wells and Distribution System 210001665

The water source for the Dowling wells is within the Onaping river watershed. In 2002 both wells were found to be groundwater under the direct influence of surface water (GUDI) with effective in-situ filtering. The additional treatment of ultraviolet light irradiation was added to enhance cleaning to comply with the treatment requirements for GUDI wells.

The treatment process follows these steps:

The system includes two well sites. Each well site contains one well pump, cleaning with chlorine gas, ultraviolet light irradiation along with fluoride (for dental health) injection. The high-water storage provides a measure of security to the water system in the event of power interruptions and watermain breaks.

Non-Compliance with Act, Regulations, Order or Approvals

Dowling DWS had one non-compliance to report in 2025 and one AWQI.

The sodium result for this system was above the maximum allowable concentration (MAC) limit in the Ontario Drinking Water Standards (ODWS).

A chlorine analyzer was not calibrated in the month of September within the allotted calibration cycle. The instrument was maintained a week later.

Annual Flow Summary

Lionel Well

Lionel Well							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	4,560	147	427	20.6	3,640	1,328,600	4.0
February	3,402	110	393	20.2	3,640	1,328,600	3.3
March	5,016	162	476	20.6	3,640	1,328,600	4.4
April	4,922	159	409	21.4	3,640	1,328,600	4.5
May	7,137	230	553	21.4	3,640	1,328,600	6.3
June	7,495	242	534	21.0	3,640	1,328,600	6.9
July	5,892	190	408	20.6	3,640	1,328,600	5.2
August	3,926	127	421	20.2	3,640	1,328,600	3.5
September	4,706	152	381	19.8	3,640	1,328,600	4.3
October	5,490	177	443	19.8	3,640	1,328,600	4.9
November	6,062	196	628	19.8	3,640	1,328,600	5.6
December	6,184	199	608	18.6	3,640	1,328,600	5.5
Total	64,792				3,640	1,328,600	4.9

Riverside Well

Riverside Well							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	4,620	149	430	30.5	3,640	1,328,600	4.1
February	5,104	165	392	30.5	3,640	1,328,600	5.0
March	5,371	173	393	30.5	3,640	1,328,600	4.8
April	5,598	181	534	31.8	3,640	1,328,600	5.1
May	5,183	167	622	32.6	3,640	1,328,600	4.6
June	4,286	138	456	29.7	3,640	1,328,600	3.9
July	4,180	135	400	35.1	3,640	1,328,600	3.7
August	5,742	185	503	29.3	3,640	1,328,600	5.1
September	5,044	163	419	29.7	3,640	1,328,600	4.6
October	5,361	173	415	30.1	3,640	1,328,600	4.8
November	5,277	170	574	30.5	3,640	1,328,600	4.8
December	4,696	151	569	29.7	3,640	1,328,600	4.2
Total	60,462				3,640	1,328,600	4.6

Blezard Valley/Capreol Drinking Water System 210000737

Blezard Valley and Capreol well supply systems were determined to be one system due to connections in 2010. This report will identify the works by geographical area where appropriate.

The Blezard Valley portion of the system is a multi-well groundwater system servicing the communities of Hanmer, Blezard Valley, Val Therese, Val Caron, McCrea Heights, Azilda and Chelmsford. Eleven (11) groundwater wells are situated throughout the Hanmer and Val Therese area. The communities are interconnected with pipe system piping and the system feeds three (3) water storage tanks located in Val Caron, Azilda, and Chelmsford. This well field extends approximately 7.5 km (west to east) from Val Therese to Hanmer.

Some of the wells are located immediately adjacent to residential homes, commercial establishments, and major arterial roadways. The water quality is beginning to show the effects of urbanization such as sodium levels higher than the provincial standard. Public education sessions and bylaws have been implemented in attempts to maintain the quality of source water.

The Blezard Wells are:

- Deschene well,
- Kenneth well (currently not in service),
- Philippe well,
- Frost well,
- I well (currently not in service),
- Notre Dame well,
- Linden well,
- Pharand well,
- Michelle well,
- Chenier well, and
- R Well.

Each well site consists of one well pump, chlorine gas, ultraviolet light irradiation along with fluoride (for dental health) injection. The pipe system has been relatively reliable. It is to be noted that all the wells producing water are before the Val Caron tank. One trunk main delivers the drinking water to the Val Caron Tank, the Azilda Tank and the Chelmsford Tank.

Two wells, I-Well and Kenneth well, were not used in 2025. Testing of raw water samples has shown high iron and manganese that compromises the aesthetic quality of the water. Removal of these levels will be evaluated after the manganese and iron removal filtering system is proven viable at M and J Wells.

The Capreol Well portion of the system draws water from two wells to service the community of Capreol.

The Capreol wells are:

- M Well, and
- J Well.

The Capreol portion of the system consists of two groundwater wells servicing the community of Capreol. They are situated on the east side of Greens Lake. Like Dowling wells, hydrogeological studies found these wells to be potentially GUDI, with effective in situ filtering and required ultraviolet light irradiation.

Each well site consists of one well pump, chlorine gas, ultraviolet light irradiation, polyphosphate for corrosion control along with fluoride (for dental health) injection.

The Blezard Valley wells can supply water through the Capreol Boosters located onsite at the wells ensuring a continued water supply to the town of Capreol in the event the two wells are unavailable.

The pipe system in Capreol was developed in conjunction with the growth of industry in the area and some of the pipe networks are relatively old. The frost depths in Capreol extend to extreme depths during cold winters, which impose additional stress on the integrity of the system. A second water main was added to the pipe system from the well as a contingency.

Non-Compliance with Act, Regulations, Order or Approvals

The Blezard Valley/Capreol DWS had four AWQIs in 2025 and one non-conformance.

On three separate occasions distribution samples were analyzed and found to have the presence of total coliforms. The sites were resampled and analyzed, and no total coliforms were present. This could be due to sampling or laboratory error as the presence of chlorine was apparent.

Employees were reinformed and conversations with the third-party lab were conducted to ensure quality assurance of sampling and lab results.

The sodium result for this system was above the MAC limit in the ODWS.

A chlorine analyzer was not calibrated in the month of September within the allotted calibration cycle. The instrument was maintained a week later.

Annual Flow Summary

Due to high iron and manganese causing aesthetic issues with the distributed water from I well and Kenneth well, they were not used in 2024. Kenneth and I wells will continue to be out of production until the manganese and iron filtering installation at M and J wells is proven to be viable. Issues with a valve prevented the use of the two Capreol wells. Most of the water provided in 2025 to the community of Capreol was produced from the Valley well field.

Well "A" Deschene

Well "A" Deschene							
	Total Flow m^3	**Average Daily Flow m^3/d**	**Maximum Daily Flow m^3/d**	**Instantaneous Peak Flow L/s**	**MDWL Daily Maximum Permitted m^3/d**	**MDWL Annual Permitted m^3**	**% Capacity**
January	25,050	808	1,617	19.4	1,798	656,212	44.9
February	20,539	734	1,008	19.4	1,798	656,212	40.8
March	31,052	1,002	1,621	19.4	1,798	656,212	55.7
April	23,884	796	1,630	19.4	1,798	656,212	44.3
May	33,478	1,080	1,634	19.6	1,798	656,212	60.1
June	33,951	1,132	1,636	19.6	1,798	656,212	62.9
July	28,867	931	1,633	19.5	1,798	656,212	51.8
August	35,395	1,142	1,638	19.6	1,798	656,212	63.5
September	34,332	1,144	1,635	19.6	1,798	656,212	63.7
October	32,109	1,036	1,626	19.6	1,798	656,212	57.6
November	25,662	855	1,620	19.5	1,798	656,212	47.6
December	26,429	853	1,624	19.5	1,798	656,212	47.4
Total	350,748				1,798	656,212	53.5

Well "B" Kenneth

Well "B" Kenneth							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	0	0	0	0.0	2,288	835,178	0.0
February	0	0	0	0.0	2,288	835,178	0.0
March	0	0	0	0.0	2,288	835,178	0.0
April	3	0	3	79.9	2,288	835,178	0.0
May	0	0	0	0.0	2,288	835,178	0.0
June	0	0	0	0.0	2,288	835,178	0.0
July	0	0	0	0.0	2,288	835,178	0.0
August	0	0	0	0.0	2,288	835,178	0.0
September	0	0	0	0.0	2,288	835,178	0.0
October	0	0	0	0.0	2,288	835,178	0.0
November	0	0	0	0.0	2,288	835,178	0.0
December	0	0	0	0.0	2,288	835,178	0.0
Total	3				2,288	835,178	0.0

Well "C" Philippe

Well "C" Philippe							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	2,250	73	710	22.9	2,288	835,178	3.2
February	631	23	329	23.0	2,288	835,178	1.0
March	1,366	44	716	26.5	2,288	835,178	1.9
April	18,568	619	1,129	33.3	2,288	835,178	27.0
May	22,856	737	1,061	24.2	2,288	835,178	32.2
June	25,052	835	1,080	44.3	2,288	835,178	36.5
July	23,306	752	1,192	40.9	2,288	835,178	32.9
August	23,854	769	1,152	29.3	2,288	835,178	33.6
September	26,242	875	1,618	29.8	2,288	835,178	38.2
October	20,828	672	983	27.4	2,288	835,178	29.4
November	18,642	621	936	24.6	2,288	835,178	27.2
December	21,117	681	1,046	26.8	2,288	835,178	29.8
Total	204,713				2,288	835,178	24.5

Well "D" Frost

Well "D" Frost							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	32,286	1,041	1,756	23.5	2,288	835,178	45.5
February	23,278	831	1,727	23.6	2,288	835,178	36.3
March	29,255	944	1,807	24.0	2,288	835,178	41.2
April	28,196	940	1,763	25.8	2,288	835,178	41.1
May	29,784	961	1,848	26.3	2,288	835,178	42.0
June	28,995	966	1,812	24.5	2,288	835,178	42.2
July	28,159	908	1,819	24.0	2,288	835,178	39.7
August	27,011	871	1,149	23.6	2,288	835,178	38.1
September	35,867	1,196	1,739	23.2	2,288	835,178	52.2
October	23,084	745	1,321	23.6	2,288	835,178	32.5
November	23,258	775	1,255	24.6	2,288	835,178	33.9
December	26,838	866	1,834	24.7	2,288	835,178	37.8
Total	336,010				2,288	835,178	40.2

Well "E" Notre Dame

Well "E" Notre Dame							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	41,202	1,329	2,487	31.8	3,105	1,133,456	42.8
February	49,612	1,772	2,545	31.8	3,105	1,133,456	57.1
March	43,542	1,405	2,526	31.4	3,105	1,133,456	45.2
April	48,611	1,620	2,504	31.9	3,105	1,133,456	52.2
May	45,351	1,463	2,515	32.3	3,105	1,133,456	47.1
June	54,687	1,823	2,520	32.8	3,105	1,133,456	58.7
July	50,388	1,625	2,472	31.7	3,105	1,133,456	52.3
August	60,540	1,953	2,520	32.5	3,105	1,133,456	62.9
September	48,897	1,630	2,523	31.9	3,105	1,133,456	52.5
October	56,469	1,822	3,153	32.2	3,105	1,133,456	58.7
November	45,259	1,509	2,521	32.5	3,105	1,133,456	48.6
December	47,936	1,546	2,526	32.5	3,105	1,133,456	49.8
Total	592,493				3,105	1,133,456	52.3

Well "F" Linden

Well "F" Linden							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	50,293	1,622	2,643	33.2	3,269	1,193,112	49.6
February	40,702	1,454	2,646	33.0	3,269	1,193,112	44.5
March	49,853	1,608	2,697	33.6	3,269	1,193,112	49.2
April	38,326	1,278	2,590	34.2	3,269	1,193,112	39.1
May	55,961	1,805	2,719	34.0	3,269	1,193,112	55.2
June	49,497	1,650	2,644	33.2	3,269	1,193,112	50.5
July	51,330	1,656	2,669	33.1	3,269	1,193,112	50.7
August	59,610	1,923	2,834	34.1	3,269	1,193,112	58.8
September	62,263	2,075	2,644	33.3	3,269	1,193,112	63.5
October	47,205	1,523	2,640	34.8	3,269	1,193,112	46.6
November	58,192	1,940	2,692	32.8	3,269	1,193,112	59.3
December	52,109	1,681	2,855	36.5	3,269	1,193,112	51.4
Total	615,339				3,269	1,193,112	51.6

Well "G" Pharand

Well "G" Pharand							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	29,418	949	1,695	25.3	2,290	835,704	41.4
February	30,554	1,091	2,018	25.2	2,290	835,704	47.7
March	37,237	1,201	2,010	25.1	2,290	835,704	52.5
April	29,995	1,000	2,003	25.2	2,290	835,704	43.7
May	38,730	1,249	2,025	25.4	2,290	835,704	54.6
June	29,035	968	1,869	25.1	2,290	835,704	42.3
July	36,912	1,191	2,011	25.5	2,290	835,704	52.0
August	34,219	1,104	2,038	25.3	2,290	835,704	48.2
September	29,028	968	1,465	25.2	2,290	835,704	42.3
October	23,319	752	1,309	25.2	2,290	835,704	32.9
November	28,140	938	1,989	25.7	2,290	835,704	41.0
December	24,042	776	1,360	25.5	2,290	835,704	33.9
Total	370,631				2,290	835,704	44.3

Well "H" Michelle

Well "H" Michelle							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	28,059	905	1,332	23.1	2,290	835,704	39.5
February	28,869	1,031	1,804	23.2	2,290	835,704	45.0
March	25,616	854	1,779	23.0	2,290	835,704	36.1
April	28,454	948	1,821	23.2	2,290	835,704	41.4
May	27,560	889	1,817	23.4	2,290	835,704	38.8
June	30,009	1,000	1,802	23.3	2,290	835,704	43.7
July	25,907	836	1,811	23.2	2,290	835,704	36.5
August	33,059	1,066	1,854	23.4	2,290	835,704	46.6
September	33,696	1,123	1,852	23.0	2,290	835,704	49.1
October	30,303	978	1,827	23.1	2,290	835,704	42.7
November	27,761	925	1,804	23.0	2,290	835,704	40.4
December	25,832	833	1,784	23.1	2,290	835,704	36.4
Total	345,124				2,290	835,704	41.3

Well “I”

Well "I"							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	0	0	0	0.0	2,288	835,178	0.0
February	0	0	0	0.0	2,288	835,178	0.0
March	0	0	0	0.0	2,288	835,178	0.0
April	0	0	0	0.0	2,288	835,178	0.0
May	0	0	0	0.0	2,288	835,178	0.0
June	0	0	0	0.0	2,288	835,178	0.0
July	0	0	0	0.0	2,288	835,178	0.0
August	0	0	0	0.0	2,288	835,178	0.0
September	0	0	0	0.0	2,288	835,178	0.0
October	0	0	0	0.0	2,288	835,178	0.0
November	0	0	0	0.0	2,288	835,178	0.0
December	0	0	0	0.0	2,288	835,178	0.0
Total	0				2,288	835,178	0.0

Well "Q" Chenier

Well "Q" Chenier							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	51,379	1,657	2,076	26.2	2,333	851,472	71.0
February	37,807	1,350	2,076	26.5	2,333	851,472	57.9
March	35,638	1,150	2,075	26.4	2,333	851,472	49.3
April	41,093	1,370	2,076	26.3	2,333	851,472	58.7
May	34,059	1,099	2,076	27.1	2,333	851,472	47.1
June	35,574	1,186	2,075	26.3	2,333	851,472	50.8
July	39,989	1,290	2,076	26.6	2,333	851,472	55.3
August	36,328	1,172	2,076	26.2	2,333	851,472	50.2
September	32,062	1,069	2,075	26.2	2,333	851,472	45.8
October	31,539	1,017	1,916	26.4	2,333	851,472	43.6
November	35,512	1,184	2,161	26.1	2,333	851,472	50.7
December	36,768	1,186	2,075	26.3	2,333	851,472	50.8
Total	447,746				2,333	851,472	52.6

Well "R"

Well "R"							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	40,959	1,321	2,163	27.9	3,162	1,154,218	41.8
February	33,707	1,204	2,163	28.1	3,162	1,154,218	38.1
March	42,996	1,387	2,163	27.9	3,162	1,154,218	43.9
April	34,688	1,196	2,163	28.7	3,162	1,154,218	36.6
May	30,279	977	1,827	29.2	3,162	1,154,218	30.9
June	39,929	1,331	2,163	29.5	3,162	1,154,218	42.1
July	37,433	1,208	2,163	29.5	3,162	1,154,218	38.2
August	13,237	427	2,162	33.4	3,162	1,154,218	13.5
September	0	0	0	0.0	3,162	1,154,218	0.0
October	40,093	1,293	2,163	33.1	3,162	1,154,218	40.9
November	33,485	1,116	2,253	28.8	3,162	1,154,218	35.3
December	40,355	1,302	2,163	29.8	3,162	1,154,218	41.2
Total	387,158				3,162	1,154,218	33.5

Well “M” Capreol

"M" Well							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	218	7	67	27.6	3,927	1,433,355	0.2
February	231	7	121	26.1	3,927	1,433,355	0.2
March	0	0	0	0.0	3,927	1,433,355	0.0
April	0	0	0	0.0	3,927	1,433,355	0.0
May	0	0	0	0.0	3,927	1,433,355	0.0
June	0	0	0	0.0	3,927	1,433,355	0.0
July	0	0	0	0.0	3,927	1,433,355	0.0
August	0	0	0	0.0	3,927	1,433,355	0.0
September	0	0	0	0.0	3,927	1,433,355	0.0
October	0	0	0	0.0	3,927	1,433,355	0.0
November	0	0	0	0.0	3,927	1,433,355	0.0
December	15,590	503	1,808	50.0	3,927	1,433,355	12.8
Total	16,038				3,927	1,433,355	1.1

Well “J” Capreol

"J" Well							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	0	0	0	0.0	3,273	1,194,645	0.0
February	0	0	0	0.0	3,273	1,194,645	0.0
March	0	0	0	0.0	3,273	1,194,645	0.0
April	0	0	0	0.0	3,273	1,194,645	0.0
May	0	0	0	0.0	3,273	1,194,645	0.0
June	0	0	0	0.0	3,273	1,194,645	0.0
July	0	0	0	0.0	3,273	1,194,645	0.0
August	0	0	0	0.0	3,273	1,194,645	0.0
September	0	0	0	0.0	3,273	1,194,645	0.0
October	0	0	0	0.0	3,273	1,194,645	0.0
November	0	0	0	0.0	3,273	1,194,645	0.0
December	0	0	0	0.0	3,273	1,194,645	0.0
Total	0				3,273	1,194,645	0.0

Falconbridge Drinking Water System - 240000020

The Falconbridge well system consists of three (3) drilled wells:

- Well 5,
- Well 6, and
- Well 7.

The system includes three (3) pumps, cleaning with chlorine gas and polyphosphate addition as a corrosion inhibitor. The wells are located north of Sudbury Airport. Water is supplied south to the town of Falconbridge, north to the Greater Sudbury Airport reservoir and to the Nickel Rim Mine tank. CGS sells water to Glencore and two industrial clients along the south transmission line and fluoridates the water before it enters the Falconbridge municipal distribution system.

Non-Compliance with Act, Regulations, Order or Approvals

The Falconbridge DWS had two AWQIs in 2025.

Two sodium results for this system were above the MAC limit in the ODWS.

Annual Flow Summary

Falconbridge Well #5

Falconbridge Well #5							
	Total Flow m^3	**Average Daily Flow m^3/d**	**Maximum Daily Flow m^3/d**	**Instantaneous Peak Flow L/s**	**MDWL Daily Maximum Permitted m^3/d**	**MDWL Annual Permitted m^3**	**% Capacity**
January	6,094	197	1,108	14.8	1,417	517,280	13.9
February	10,968	354	1,055	14.9	1,417	517,280	27.6
March	15,508	500	1,006	14.9	1,417	517,280	35.3
April	8,294	268	1,038	15.0	1,417	517,280	19.5
May	13,911	449	1,020	15.0	1,417	517,280	31.7
June	7,161	231	908	15.0	1,417	517,280	16.8
July	14,452	466	1,038	15.3	1,417	517,280	32.9
August	14,775	477	1,070	15.5	1,417	517,280	33.6
September	22,108	713	1,150	15.2	1,417	517,280	52.0
October	19,085	616	1,155	15.2	1,417	517,280	43.4
November	14,137	456	1,090	14.8	1,417	517,280	33.2
December	3,985	129	1,025	15.4	1,417	517,280	9.1
Total	150,478				1,417	517,280	29.1

Falconbridge Well #6

Falconbridge Well #6							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	10,587	342	1,075	16.0	1,417	517,280	24.1
February	6,521	210	1,063	15.2	1,417	517,280	16.4
March	7,181	232	1,037	15.3	1,417	517,280	16.3
April	9,063	292	1,096	15.4	1,417	517,280	21.3
May	7,316	236	1,074	15.7	1,417	517,280	16.7
June	6,532	211	1,074	16.3	1,417	517,280	15.4
July	13,654	440	1,203	16.8	1,417	517,280	31.1
August	13,265	428	1,102	16.8	1,417	517,280	30.2
September	2,890	93	812	15.5	1,417	517,280	6.8
October	5,893	190	1,167	15.8	1,417	517,280	13.4
November	3,092	100	1,055	16.0	1,417	517,280	7.3
December	8,893	287	1,061	16.1	1,417	517,280	20.2
Total	94,887				1,417	517,280	18.3

Falconbridge Well #7

Falconbridge Well #7							
	Total Flow m^3	Average Daily Flow m^3/d	Maximum Daily Flow m^3/d	Instantaneous Peak Flow L/s	MDWL Daily Maximum Permitted m^3/d	MDWL Annual Permitted m^3	% Capacity
January	9,269	299	958	13.6	1,417	517,280	21.1
February	7,387	238	951	13.2	1,417	517,280	18.6
March	6,792	219	1,011	13.2	1,417	517,280	15.5
April	10,363	334	1,007	13.4	1,417	517,280	24.4
May	7,335	237	1,066	13.7	1,417	517,280	16.7
June	14,474	467	1,077	13.7	1,417	517,280	34.0
July	1,623	52	871	19.6	1,417	517,280	3.7
August	0	0	0	0.0	1,417	517,280	0.0
September	4,044	130	1,045	21.0	1,417	517,280	9.5
October	7,567	244	1,059	25.0	1,417	517,280	17.2
November	11,353	366	1,017	13.0	1,417	517,280	26.7
December	14,980	483	934	13.7	1,417	517,280	34.1
Total	95,186				1,417	517,280	18.4

Onaping/Levack Drinking Water System - 220003519

The Onaping/Levack system includes three (3) drilled wells:

- Well 3,
- Well 4, and
- Well 5.

The system includes three (3) pumps, chlorine gas, sodium hydroxide for pH adjustment, polyphosphate addition as a corrosion inhibitor and fluoride (for dental health) injection. A high storage tank with re-chlorination capabilities, a pressure control/booster building with stand-by power, a pressure control facility on Fraser Crescent and the distribution system completes the system. The City continues to monitor sodium levels in the raw water monthly due to large amounts of road salt used on a provincial highway located near the wells.

Non-Compliance with Act, Regulations, Order or Approvals

The Onaping DWS had one AWQI reported in 2025.

The sodium result for this system was above the MAC limit in the ODWS.

Annual Flow Summary

The Onaping/Levack PTTW is different from the other systems in that its total taking is not a sum of all sources, but rather the same value as any one well. For that reason, this system requires superimposing all three wells onto one table to ensure the sum does not exceed the permit.

Onaping Wells Total

Onaping Wells Total					
	Total Flow m^3	**Maximum Daily Flow m^3/d**	**MDWL Daily Maximum Permitted m^3/d**	**MDWL Annual Permitted m^3**	**% Capacity**
January	73,729	2,761	5,237	1,911,541	45.4
February	63,217	2,740	5,237	1,911,541	43.1
March	66,680	2,612	5,237	1,911,541	41.1
April	63,606	2,547	5,237	1,911,541	40.5
May	63,778	2,439	5,237	1,911,541	39.3
June	53,926	2,431	5,237	1,911,541	34.3
July	57,348	2,352	5,237	1,911,541	35.3
August	57,800	2,360	5,237	1,911,541	35.6
September	57,837	2,405	5,237	1,911,541	36.8
October	57,901	2,264	5,237	1,911,541	35.7
November	54,234	2,109	5,237	1,911,541	34.5
December	50,734	2,271	5,237	1,911,541	31.3
Total	720,791		5,237	1,911,541	37.7

Vermilion Distribution System - 260006789

The Vermilion drinking water system is a standalone pipe system that receives water from a “donor” system, as CGS purchases water from Vale, the owner of the Vermilion Water Treatment Plant. Vale has responsibility for the treatment facility and must also comply with O. Reg. 170/03. The Vale water treatment facility is not the subject of this report.

CGS owns and operates the distribution system network in the communities of Copper Cliff, Lively, Naughton, and Whitefish. The system also includes the Walden Water Storage Tank and Walden Metering Chamber.

The Vermilion DWS supplies the distribution system serving the community of Atikameksheng Anishinawbek through the Naughton Metering Chamber. Beyond the metering chamber, Atikameksheng Anishinabek operates its own distribution system.

Water quality throughout the distribution system is monitored through regular sampling in accordance with O. Reg. 170/03.

Non-Compliance with Act, Regulations, Order or Approvals

The Vermilion DWS had no AWQI or non-compliance to report in 2025.