2017 Schedule 22 Annual Summary Report

Nakina Drinking-Water System

March 2018

Prepared by the



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Section 1: Introduction

This report is a summary of water quality information for the Nakina Drinking-Water System, published in accordance with Schedule 22 of Ontario's Drinking-Water Systems Regulation for the reporting period of January 1st to December 31st 2017. The Nakina Drinking-Water System is categorized as a Large Municipal Residential Drinking Water System.

This report is prepared by The Ontario Clean Water Agency on behalf of the Corporation of the Municipality of Greenstone – Nakina Ward. A copy of the Summary Report is to be provided to the members of the municipal council by March 31st 2018.

Section 2: What Does This Report Contain?

"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."

- O. Reg. 170/03 s. 22 (2)

"The report must also include the following information for the purpose of enabling the owner of the system to assess the rated capability of their 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.
- 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."

-O. Reg. 170/03 s. 22 (3)

Section 3: Daily Flow Rates

In accordance with the *Municipal Drinking Water Licence 225-103 Schedule C: System – Specific Conditions 1.0 Performance Limits*, the Nakina drinking water system shall not be operated to exceed the rated capacity for maximum flow rate from the treatment subsystem to the distribution system of 2000 m³ / day.

The drinking water system may be operated temporarily at a rate above the rated capacity where necessary for:

- (i) the purposes of fighting a large fire or,
- (ii) the maintenance of the drinking-water system

In 2017, the average monthly raw flow rate was 6291.42 m³; the average raw daily flow rate was 206.84 m³, with a maximum raw daily flow rate of 1001.00 m³.

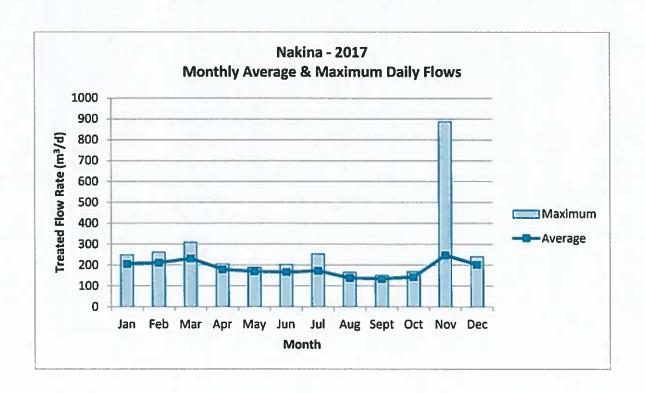
In 2017, the average monthly treated flow rate was 5584.92 m³; the average daily treated flow was 183.83 m³ and the maximum daily treated flow for the year was 888.00 m³; this represents 44.4 % of the allowable daily volume.

A summary of raw and treated flows, including maximum raw flow into the treatment system as well as treated average, maximum and total flow rates are included in the tables below.

The quantity of raw water supplied during the reporting period did not exceed the terms and conditions of the *Permit to Take Water* nor did the treated flows directed to the distribution system exceed the rated capacity for this system.

Monthly Raw & Treated Flow Rates for 2017

Month	Average Daily Raw Flow Rate (m³/d)	Maximum Daily Raw Flow Rate (m³/d)	Average Daily Treated Flow Rate (m³/d)	Maximum Daily Treated Flow Rate (m³/d)	Total Monthly Treated Flow Rate (m³/month)
January	223.58	354.00	205.87	249.00	6382.00
February	227.57	361.00	211.68	261.00	5927.00
March	258.97	436.00	231.68	309.00	7182.00
April	199.57	238.00	179.83	206.00	5395.00
May	192.77	307.00	170.26	189.00	5278.00
June	204.60	399.00	167.20	203.00	5016.00
July	194.42	410.00	173.10	253.00	5366.00
August	168.32	217.00	138.65	166.00	4298.00
September	167.17	216.00	134.40	151.00	4032.00
October	162.45	277.00	143.03	168.00	4434.00
November	270.63	1001.00	247.83	888.00	7435.00
December	214.52	397.00	202.39	241.00	6274.00
		2017 Total Tr	eated Flows (m³)	670:	19.00



Section 4: System Failures and Correction

The Ministry of Environment conducted an *announced* inspection of the Nakina Drinking Water System on January 23rd, 2018. There final inspection report has yet to be issued.

The 2016 final inspection rating record for the Nakina Drinking Water System was 100%.

Item	Non-Compliance Identified	Compliance Date	Action Being Taken to Address item	Status
N/A	N/A	N/A	N/A	N/A

Section 5: Conclusion

In the reporting year of 2017, there were no adverse water quality incident (AWQI) reports filed.

Incident Parameter		Parameter Result Unit of		Corrective Action	Corrective
Date		Measure			Action Date
N/A	N/A	N/A	N/A	N/A	N/A

For the operating year of 2017, the Nakina Drinking Water System was able to meet the demand of water use within the town without exceeding the Municipal Drinking Water License and Permit to Take Water.