



February 26, 2020
Municipality of West Perth
169 St. David Street
Mitchell, Ontario
N0K 1N0

**ATTENTION: Mr. Jeff Brick
CAO**

**REFERENCE: Municipality of West Perth
2019 Annual Drinking Water Report**

Please find enclosed the 2019 Annual Drinking Water Report for the Mitchell Drinking Water System. The report is prepared in accordance with O. Reg 170/03 of the Safe Drinking Water Act.

This report covers January 1, 2019 to December 31, 2019. The annual report must be prepared no later than February 28 of the following year and must be presented to council by March 31.

A copy of this report will be available at the Municipal Office, the Mitchell Public Library and on the Municipality's website.

Copies of this report are to be made available free of charge when requested. Any questions or concerns regarding this report can be directed towards the Environmental Services Department.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. W. J.", is placed below the word "Sincerely,".

Environmental Services
Municipality of West Perth

Part 1 - ANNUAL REPORT (as required by O. Reg. 170/03, Section 11)

Drinking-Water System Number:	210000577
Drinking-Water System Name:	Mitchell Drinking Water System
Drinking-Water System Owner:	Municipality of West Perth
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2019 to December 31, 2019

Complete if your Category is Large Municipal Residential or Small Municipal Residential	Complete for all other Categories
<p><i>Does your Drinking-Water System serve more than 10,000 people?</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p><i>Number of Designated Facilities served:</i></p>
<p><i>Is your annual report available to the public at no charge on a web site on the Internet?</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><i>Did you provide a copy of your annual report to all Designated Facilities you serve?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p><i>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</i></p> <p>Municipal Office, Mitchell Public Library and Municipality of West Perth Website</p>	<p><i>Number of Interested Authorities you report to:</i></p> <p><i>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No</p>

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
N/A	

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?
N/A

Indicate how you notified system users that your annual report is available and is free of charge.		
<input checked="" type="checkbox"/> Public access/notice via the web	<input checked="" type="checkbox"/> Public access/notice via Government Office	<input type="checkbox"/> Public access/notice via a newspaper
<input checked="" type="checkbox"/> Public access/notice via Public Request	<input checked="" type="checkbox"/> Public access/notice via a Public Library	<input type="checkbox"/> Public access/notice via Other Method _____

Describe your Drinking Water System

The Mitchell Drinking Water System is a Class II Distribution and Supply sub-system owned and operated by the Municipality of West Perth. The system consists of four drilled groundwater wells.

Well #1, contained within Well-house #1, is 23.2m deep and has a 200mm steel liner inserted into the original 305mm well casing. Raw water from this well is pumped through piping past Well-house #2 where, when required, it is combined with raw water from Well #2 and directed to Distribution Center 123.

Well #2 is 30.2m deep and has a 200mm steel liner inserted into the original 305mm well casing. Raw water is combined with raw water from Well #1 when required and directed to Distribution Center 123.

Well #3 is the main well for Distribution Center 123. The well is 54.7m deep with a 200mm steel liner inserted into the original 305mm well casing. Water from this well is conveyed through piping to Distribution Center 123.

Well #4, located within Distribution Center 4, was drilled to a final depth of 71.6m with a 300mm steel casing. Raw water from this well is treated within Distribution Center 4. Raw water from all four wells is typically free from any bacteriological activity. The water is hard and naturally has elevated levels of fluoride. The turbidity of the raw water ranges from 0.1-0.5 NTU.

Other than the normal increase in usage during the summer months, there are no major operational challenges due to event-driven fluctuations.

Distribution Center 123 is located on the west side of St. George St. The storage reservoir is located adjacent to the eastern limit of the plant. It has a baffled section with a capacity of 155m³ and an unbaffled section with a capacity of 243m³. Raw water from Wells 1, 2 and 3 is conveyed into the plant, after which treatment chemicals are injected; sodium silicate for iron sequestering, and sodium hypochlorite for disinfection. The treated water is directed into the reservoir for contact time and then through the high lift pumps into the distribution system. Distribution Center 123 also has a backup chlorination system.

Distribution Center 4 is located near the NW corner of Arthur and Herbert streets. The plant includes a disinfection system and a 250m³ baffled, below grade reservoir. Primary disinfection is achieved using liquid sodium hypochlorite. Sodium silicate is injected for iron sequestering. As in Distribution Center 123, the treated water is directed into the reservoir for contact time and then through the high lift pumps into the distribution system. The disinfection system has been designed with backup pumps.

<p>The Mitchell Standpipe is located at 87 Arthur Street. It is approximately 46m high and approximately 11m wide. The standpipe control building houses a series of water pipes and valves used to regulate the level of the standpipe. A diesel-powered fire pump is also connected to the piping system.</p> <p>The Mitchell Water Tower is located at 125 Clarke Street. It is approximately 41m high and has a capacity of 1,000 m³. The control room has pipes and valves, level and flow monitoring equipment, and re-chlorination equipment.</p> <p>The works currently service a population of approximately 4,000. There is approximately 42 km of distribution piping of various diameters and materials contained within the Mitchell Drinking Water System (see Watermain Plan drawing in Appendix C). There are approximately 1950 service connections and 212 fire hydrants. Flow varies across the grid, with lower flow volumes in the most remote and dead-end parts of the grid. Pressure within the distribution system is maintained by the level of the standpipe and water tower. If required, the distribution system pressure can be controlled by the high lift pump at Distribution Center 4.</p>
<p>List all water treatment chemicals used over this reporting period</p>
<p>Liquid Chlorine 12% - NSF Liquid Chlorine 6% - NSF Sodium Silicate - NSF</p>
<p>Please provide a brief description and a breakdown of monetary expenses incurred</p>
<ul style="list-style-type: none"> - Henry St. underground infrastructure replaced between St. Andrew St. and Arthur St. - Well 3 motor was replaced. - D123 Silicate pump replaced.

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	Corrective Action	Corrective Action Date
04-15-19	Operational, Chlorine Residual	0.06mg/L	Restore Residual	04-15-19
05-29-19	Operational, Chlorine Residual	0.09mg/L	Restore Residual, Sampled	05-29-19
07-24-19	Observation of Improper Disinfection*	N/A	Repair main, Sampled	07-24-19 07-26-19
08-09-19	Observation of Improper Disinfection*	N/A	Repair main, Sampled	08-09-19 08-11-19
09-04-19	Observation of Improper Disinfection*	N/A	Repair main, Sampled	09-04-19 09-06-19

* Incidents were Category 2 watermain breaks and were reported as per the Ontario Watermain Disinfection Procedure section 3.1.3.2.

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 Results (min #) - (max#)	Range of Total Coliform Results (min #) - (max#)	Number of HPC Samples	Range of HPC Results (min #) - (max#)
Raw Well #1	53	0-0	0-0	N/A	N/A
Raw Well #2	53	0-0	0-0	N/A	N/A
Raw Well #3	45	0-0	0-0	N/A	N/A
Raw Well #4	53	0-0	0-0	N/A	N/A
POE #123	53	0-0	0-0	53	0-1
POE #4	53	0-0	0-0	53	0-4
Distribution	213	0-0	0-0	53	0-2

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report					
	Continuous Monitoring	Number of Grab Samples	Range of Results Continuous (Min-Max)	Range of Results Grab Samples (Min-Max)	Units
Turbidity Raw Well #1	N/A	52	N/A	0.04-0.42	NTU
Turbidity Raw Well #2	N/A	52	N/A	0.04-0.47	NTU
Turbidity Raw Well #3	N/A	43	N/A	0.07-0.39	NTU
Turbidity Raw Well #4	N/A	52	N/A	0.04-0.36	NTU
Chlorine - POE 123	8760	549	0.00* – 5.00*	0.78-1.77	mg/L
Chlorine - POE 4	8760	576	0.04* – 3.01*	0.97-1.64	mg/L

*Value due to operational maintenance on analyzer.

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
N/A				

Treatment 123 (Reservoir and Distribution Center)

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	Apr 04, 2018	ND	µg/L	No
Arsenic	Apr 04, 2018	3.0	µg/L	No
Barium	Apr 04, 2018	57	µg/L	No
Boron	Apr 04, 2018	110	µg/L	No
Cadmium	Apr 04, 2018	ND	µg/L	No
Chromium	Apr 04, 2018	ND	µg/L	No
Lead - see results below				
Mercury	Apr 04, 2018	ND	µg/L	No
Selenium	Apr 04, 2018	ND	µg/L	No
Sodium	Nov 05, 2018	35	mg/L	Yes
Uranium	Apr 04, 2018	ND	µg/L	No
Fluoride	Dec 18, 2017	1.9	mg/L	Yes
Nitrite	Jan 07, 2019	ND	µg/L	No
Nitrate	Jan 07, 2019	ND	µg/L	No
Nitrite	Apr 01, 2019	ND	µg/L	No
Nitrate	Apr 01, 2019	ND	µg/L	No
Nitrite	Jul 02, 2019	ND	µg/L	No
Nitrate	Jul 02, 2019	ND	µg/L	No
Nitrite	Oct 07, 2019	ND	µg/L	No
Nitrate	Oct 07, 2019	ND	µg/L	No

ND = Not detected

Treatment 4 (Reservoir and Distribution Center)

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	Dec. 02 2019	ND	µg/L	No
Arsenic	Dec. 02 2019	1.8	µg/L	No
Barium	Dec. 02 2019	59	µg/L	No
Boron	Dec. 02 2019	120	µg/L	No
Cadmium	Dec. 02 2019	ND	µg/L	No
Chromium	Dec. 02 2019	ND	µg/L	No
Lead - see results below				
Mercury	Dec 02, 2019	ND	µg/L	No
Selenium	Dec 02, 2019	ND	µg/L	No
Sodium	Dec 02, 2019	47	mg/L	Yes
Uranium	Dec 02, 2019	0.19	µg/L	No
Fluoride	Dec 18, 2017	1.8	mg/L	Yes
Nitrite	Jan 07, 2019	ND	µg/L	No
Nitrate	Jan 07, 2019	ND	µg/L	No
Nitrite	Apr 01, 2019	ND	µg/L	No
Nitrate	Apr 01, 2019	ND	µg/L	No
Nitrite	Jul 02, 2019	ND	µg/L	No
Nitrate	Jul 02, 2019	ND	µg/L	No
Nitrite	Oct 07, 2019	ND	µg/L	No
Nitrate	Oct 07, 2019	ND	µg/L	No

ND = Not detected

Lead Testing Results

Summary of Lead Results during this reporting period (Winter: Dec 15 – April 15; Summer: June 15 - Oct 15)				
Sampling Period	Location	Distribution System Lead (mg/L)	Distribution System Alkalinity (mg/L)	Any Adverse Water Quality Incidents?
Mar 18, 2019	Well #3 SS	N/A	200	N
Mar 18, 2019	Hydrant #61	N/A	210	N
Mar 18, 2019	Hydrant #135	N/A	210	N
Jun 24, 2019	Well #3 SS	N/A	200	N
Jun 24, 2019	Hydrant #135	N/A	200	N
Jun 24, 2019	Hydrant #61	N/A	200	N

ND = Not detected

Point of Entry 123

Summary of Organic parameters tested during this reporting period or the most recent sample results				
Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Semivolatile Organics				
2,3,4,6- Tetrachlorophenol	Apr. 9 2018	ND	µg/L	No
2,4,6-Trichlorophenol	Apr. 9 2018	ND	µg/L	No
2,4-D	Apr. 9 2018	ND	µg/L	No
2,4-Dichlorophenol	Apr. 9 2018	ND	µg/L	No
Alachlor	Apr. 9 2018	ND	µg/L	No
Atrazine	Apr. 9 2018	ND	µg/L	No
Des-ethyl atrazine	Apr. 9 2018	ND	µg/L	No
Atrazine+Desethyl-atrazine	Apr. 9 2018	ND	µg/L	No
Bromoxynil	Apr. 9 2018	ND	µg/L	No
Carbaryl	Apr. 9 2018	ND	µg/L	No
Carbofuran	Apr. 9 2018	ND	µg/L	No
Chlorpyrifos(Dursban)	Apr. 9 2018	ND	µg/L	No
Diazinon	Apr. 9 2018	ND	µg/L	No
Dicamba	Apr. 9 2018	ND	µg/L	No
Diclofop-methyl	Apr. 9 2018	ND	µg/L	No
Dimethoate	Apr. 9 2018	ND	µg/L	No
Malathion	Apr. 9 2018	ND	µg/L	No
MCPA	Apr. 9 2018	ND	µg/L	No
Metolachlor	Apr. 9 2018	ND	µg/L	No
Metribuzin(Sencor)	Apr. 9 2018	ND	µg/L	No
Pentachlorophenol	Apr. 9 2018	ND	µg/L	No
Phorate	Apr. 9 2018	ND	µg/L	No
Picloram	Apr. 9 2018	ND	µg/L	No
Prometryne	Apr. 9 2018	ND	µg/L	No
Simazine	Apr. 9 2018	ND	µg/L	No
Terbufos	Apr. 9 2018	ND	µg/L	No
Triallate	Apr. 9 2018	ND	µg/L	No
Trifluralin	Apr. 9 2018	ND	µg/L	No
Benzo(a)pyrene	Apr. 9 2018	ND	µg/L	No
Volatile Organics				
1,1-Dichloroethylene	Apr. 9 2018	ND	µg/L	No
1,2-Dichlorobenzene	Apr. 9 2018	ND	µg/L	No
1,2-Dichloroethane	Apr. 9 2018	ND	µg/L	No
1,4-Dichlorobenzene	Apr. 9 2018	ND	µg/L	No
Benzene	Apr. 9 2018	ND	µg/L	No
Carbon Tetrachloride	Apr. 9 2018	ND	µg/L	No

Summary of Organic parameters tested during this reporting period or the most recent sample results				
Chlorobenzene	Apr. 9 2018	ND	µg/L	No
Methylene Chloride (Dichloromethane)	Apr. 9 2018	ND	µg/L	No
Ethylbenzene	Apr. 9 2018	ND	µg/L	No
Tetrachloroethylene	Apr. 9 2018	ND	µg/L	No
Toluene	Apr. 9 2018	ND	µg/L	No
Trichloroethylene	Apr. 9 2018	ND	µg/L	No
Vinyl Chloride	Apr. 9 2018	ND	µg/L	No
o-Xylene	Apr. 9 2018	ND	µg/L	No
p+m-Xylene	Apr. 9 2018	ND	µg/L	No
Total Xylenes	Apr. 9 2018	ND	µg/L	No
PCBs				
Total PCB	Apr. 9 2018	ND	µg/L	No
THM (NOTE: show latest running annual average)	Q1-Q4 2019	26.90	µg/L	No
HAA (NOTE: show latest running annual average)	Q1-Q4 2019	4.5	µg/L	No
Pesticides & Herbicides				
Glyphosate	Apr. 9 2018	ND	µg/L	No
Diquat	Apr. 9 2018	ND	µg/L	No
Diuron	Apr. 9 2018	ND	µg/L	No
Guthion (Azinphos-methyl)	Apr. 9 2018	ND	µg/L	No
Paraquat	Apr. 9 2018	ND	µg/L	No
Temephos	Apr. 9 2018	ND	µg/L	No

ND = Not detected

Point of Entry 4

Summary of Organic parameters tested during this reporting period or the most recent sample results				
Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Semivolatile Organics				
2,3,4,6- Tetrachlorophenol	Dec. 2 2019	ND	µg/L	No
2,4,6-Trichlorophenol	Dec. 2 2019	ND	µg/L	No
2,4-D	Dec. 2 2019	ND	µg/L	No
2,4-Dichlorophenol	Dec. 2 2019	ND	µg/L	No
Alachlor	Dec. 2 2019	ND	µg/L	No
Atrazine	Dec. 2 2019	ND	µg/L	No
Des-ethyl atrazine	Dec. 2 2019	ND	µg/L	No
Atrazine+Desethyl-atrazine	Dec. 2 2019	ND	µg/L	No
Bromoxynil	Dec. 2 2019	ND	µg/L	No
Carbaryl	Dec. 2 2019	ND	µg/L	No
Carbofuran	Dec. 2 2019	ND	µg/L	No
Chlorpyrifos(Dursban)	Dec. 2 2019	ND	µg/L	No
Diazinon	Dec. 2 2019	ND	µg/L	No
Dicamba	Dec. 2 2019	ND	µg/L	No
Diclofop-methyl	Dec. 2 2019	ND	µg/L	No
Dimethoate	Dec. 2 2019	ND	µg/L	No
Malathion	Dec. 2 2019	ND	µg/L	No
MCPA	Dec. 2 2019	ND	µg/L	No
Metolachlor	Dec. 2 2019	ND	µg/L	No
Metribuzin(Sencor)	Dec. 2 2019	ND	µg/L	No
Pentachlorophenol	Dec. 2 2019	ND	µg/L	No
Phorate	Dec. 2 2019	ND	µg/L	No
Picloram	Dec. 2 2019	ND	µg/L	No
Prometryne	Dec. 2 2019	ND	µg/L	No
Simazine	Dec. 2 2019	ND	µg/L	No
Terbufos	Dec. 2 2019	ND	µg/L	No
Triallate	Dec. 2 2019	ND	µg/L	No
Trifluralin	Dec. 2 2019	ND	µg/L	No
Benzo(a)pyrene	Dec. 2 2019	ND	µg/L	No
Volatile Organics				
1,1-Dichloroethylene	Dec. 2 2019	ND	µg/L	No
1,2-Dichlorobenzene	Dec. 2 2019	ND	µg/L	No
1,2-Dichloroethane	Dec. 2 2019	ND	µg/L	No
1,4-Dichlorobenzene	Dec. 2 2019	ND	µg/L	No
Benzene	Dec. 2 2019	ND	µg/L	No
Carbon Tetrachloride	Dec. 2 2019	ND	µg/L	No
Chlorobenzene	Dec. 2 2019	ND	µg/L	No

Summary of Organic parameters tested during this reporting period or the most recent sample results				
Methylene Chloride (Dichloromethane)	Dec. 2 2019	ND	µg/L	No
Ethylbenzene	Dec. 2 2019	ND	µg/L	No
Tetrachloroethylene	Dec. 2 2019	ND	µg/L	No
Toluene	Dec. 2 2019	ND	µg/L	No
Trichloroethylene	Dec. 2 2019	ND	µg/L	No
Vinyl Chloride	Dec. 2 2019	ND	µg/L	No
o-Xylene	Dec. 2 2019	ND	µg/L	No
p+m-Xylene	Dec. 2 2019	ND	µg/L	No
Total Xylenes	Dec. 2 2019	ND	µg/L	No
PCBs				
Total PCB	Dec. 2 2019	ND	µg/L	No
THM (NOTE: show latest running annual average)	Q1-Q4 2019	26.90	µg/L	No
HAA (NOTE: show latest running annual average)	Q1-Q4 2019	4.5	µg/L	No
Pesticides & Herbicides				
Glyphosate	Dec. 2 2019	ND	µg/L	No
Diquat	Dec. 2 2019	ND	µg/L	No
Diuron	Dec. 2 2019	ND	µg/L	No
Guthion (Azinphos-methyl)	Dec. 2 2019	ND	µg/L	No
Paraquat	Dec. 2 2019	ND	µg/L	No

ND = Not detected

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.				
Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
N/A				

Part 2 – SUMMARY REPORT (as required by O. Reg. 170/03, Schedule 22)

Non-Compliance with Legislations, Regulations, Approvals & Orders

During this period, the Facility was operated in full compliance with the Act, the regulations and the Facility’s approval, save and except for the following:

- Failed to comply with O-Reg 170/03, Schedule 1-2 (2). Statement of non-compliance from drinking water inspection report “*There were two occasions during the inspection review period where operators could not confirm whether primary treatment was met for a short period of time. The pumps had shut off water to the distribution system once the free chlorine residual reached the low set point The SCADA data however still read a lower residual than is required to ensure primary treatment was met.*” Operators followed the direction of both the drinking water inspector and health unit during the events, the responses differed between events. Sampling and flushing were completed, at no time were the system users placed at risk.

Well #1

System Capability Assessment			
Comparison of Flow Rates (raw flow; m ³):			
Month	Average Daily Flow	Maximum Daily Flow	*Max Flow (L/min)
January	43.61	251.01	1505.4
February	20.89	333	1507.8
March	111.74	757.99	1469.4
April	141.77	800.01	1564.8
May	141.74	757	1546.2
June	160.60	1095	1529.4
July	238.06	1067.01	1529.4
August	211.71	1179.99	1481.4
September	341.1	1302	1786.8
October	467.81	1278.01	1567.8
November	511.07	1344.01	1783.8
December	207.74	1036	1650.6
MAXIMUM	N/A	1344.01	1786.8
AVERAGE	216.49	933.42	1576.9
PTTW	N/A	2617.92	1818
% of PTTW MAX	-	51.34%	98.28%
% of PTTW AVG	-	35.66%	86.74%

Well #2

System Capability Assessment			
Comparison of Flow Rates (raw flow; m ³):			
Month	Average Daily Flow	Maximum Daily Flow	Max Flow (L/min)
January	4.13	23.98	2106.0*
February	9.39	129.99	1996.8
March	148.84	1060.99	2300.4*
April	274.97	1183.03	2973*
May	260.23	1475.99	2152.2*
June	238.5	1503	2020.8
July	276.1	1437.98	1900.8
August	283	1311	1882.8
September	515.63	2015	1859.4
October	710.32	1942.01	1858.8
November	697.63	1882	1839.6
December	257.71	1239	1851.6
MAXIMUM	N/A	2015.00	2973
AVERAGE	306.37	1267.00	2061.85
PTTW	N/A	3024	2100
% of PTTW MAX	-	66.63%	141.57%
% of PTTW AVG	-	41.90%	98.18%

*First min of start up was over PTTW L/min. Second min of running was below PTTW L/min. Did not exceed L/day as per PTTW.

Well #3

System Capability Assessment			
Comparison of Flow Rates (raw flow; m ³):			
Month	Average Daily Flow	Maximum Daily Flow	Max Flow (L/min)
January	1131.1	2961.01	2815.8
February	1302.36	3157.01	2824.8
March	896.1	3156.01	2821.2
April	896.6	2608.03	2822.4
May	925.77	2461.01	2823
June	772.53	2634	2821.8
July	1009.84	2665.01	2833.2
August	976.1	2747.03	2821.2
September	425	2391.99	2820.0
October	0	0	0
November	167.6	2259.97	2818.8
December	862.23	2234	2827.8
MAXIMUM	N/A	3157.01	2833.2
AVERAGE	780.44	2439.59	2587.5
PTTW	N/A	3900.0	2880.0
% of PTTW MAX	-	80.95%	98.38%
% of PTTW AVG	-	62.55%	89.84%

Well #4

System Capability Assessment			
Comparison of Flow Rates (raw flow; m ³):			
Month	Average Daily Flow	Maximum Daily Flow	Max Flow (L/min)
January	1490.26	4533	4284.0
February	1442.21	3795	4255.2
March	1533.52	3822	4290.9
April	1532.40	3883	4296.6
May	1506.39	3929	4309.8
June	1716.83	3979	4368.6
July	1497.58	4198	5673.0
August	1547.23	4228	5372.4
September	1553.67	3725	5392.8
October	1852.23	4207	5349.0
November	1505.43	3924	5348.4
December	1174.84	3555	5283.0
MAXIMUM	N/A	4533	5673.0
AVERAGE	1529.38	3981.5	4852.0
PTTW	N/A	8640	6000
% of PTTW MAX	-	52.47%	94.55%
% of PTTW AVG	-	46.08%	80.87%

Distribution Center #123

System Capability Assessment		
Comparison of Flow Rates (total treated flow; m ³ /d):		
Month	Average Flow	Maximum Daily Flow
January	1111.77	3086.47
February	1295.55	3083.54
March	1111.49	3384.93
April	1264.95	3772.14
May	1277.43	3476.56
June	1129.83	3885.72
July	1475.74	3877.53
August	1421.01	3958.11
September	1221.25	3372.31
October	1125.33	3084.56
November	1316.89	3339.09
December	1288.61	3298.06
AVERAGE	1253.32	N/A
MAXIMUM	N/A	3958.11
SYSTEM CAPACITY	8640	8640
% CAPACITY	14.51%	45.81%

Distribution Center #4

System Capability Assessment		
Comparison of Flow Rates (total treated flow; m ³ /d):		
Month	Average Flow	Maximum Flow
January	1468.74	4418
February	1421.89	3720
March	1511.48	3788
April	1510.77	3854
May	1482.10	3873
June	1690.70	3919
July	1473.32	4137
August	1523.19	4164
September	1527.67	3664
October	1820	4167
November	1479.27	3824
December	1155.19	3471
AVERAGE	1505.36	N/A
MAXIMUM	N/A	4418
SYSTEM CAPACITY	8640	8640
% CAPACITY	17.42%	51.13%